



ACES vs MAPA (SB21): REVENUES AND JOBS

Commonwealth North
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Disclosure and Disclaimer



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and Economic Research
UNIVERSITY *of* ALASKA ANCHORAGE

ACES Revenue Volatility

ACES REVENUE (BILLION \$)



Deficit Spending Started Under ACES

Alaska Dispatch

News and voices from the Last Frontier
Published on *Alaska Dispatch* (<http://www.alaskadispatch.com>)

[Home](#) > Report: Alaska faces budget shortfall in FY 2013 and beyond

Alaska Dispatch
January 15, 2013

Alaska's Legislative Finance Division released a [report](#) [1] on Monday that lays out the harsh reality for the state's budget situation for Fiscal Year 2014.

If spending for FY14 – beginning July 1, 2013 – were to be the same as the current year, the state would face a budget deficit of \$920 million, [The Associated Press](#) [2] reports.

The report explains how at the close of the 2012 session, lawmakers projected a \$490 million surplus for FY13. However, due to declining oil production and lower-than-projected oil prices, Alaska now faces a \$410 million deficit for FY13.

According to the report, "The Department of Revenue predicts that FY14 oil production will decline by 2.7 percent from FY13, and that oil prices will be about \$1 per barrel more than in FY13 (\$108.67 in FY13 and \$109.61 in FY14). The result is that projected FY14 unrestricted general fund revenue is \$510 million below projected FY13 revenue."

"There will be no debating 'spend versus save' during deliberation of the FY13 supplemental budget; there is likely to be a withdrawal from savings to fill the FY13 budget gap," the report's overview states.

The report also states that the deficit situation is new for legislators whose terms began after FY05; for the past eight years, higher-than-projected oil prices "more than made up" lower-than-projected oil production, so revenue exceeded expectations, and expenditures.

Gov. Parnell's budget director Karen Rehfeld told the Associated Press that the governor is proposing a "very, very lean budget" to lawmakers. He will also propose an overhaul to the state's oil tax system.

"With declining [oil] production and revenue we have to be smarter with the people's money," Parnell [told guests](#) [3] at a Chamber of Commerce luncheon in downtown Anchorage in December, where he first revealed his proposed budget for 2014. Because of lower production and lower oil prices, Parnell told the crowd the state is projected to lose \$1.6 billion in revenue over this fiscal year and next.

Read the [entire report](#) [1].

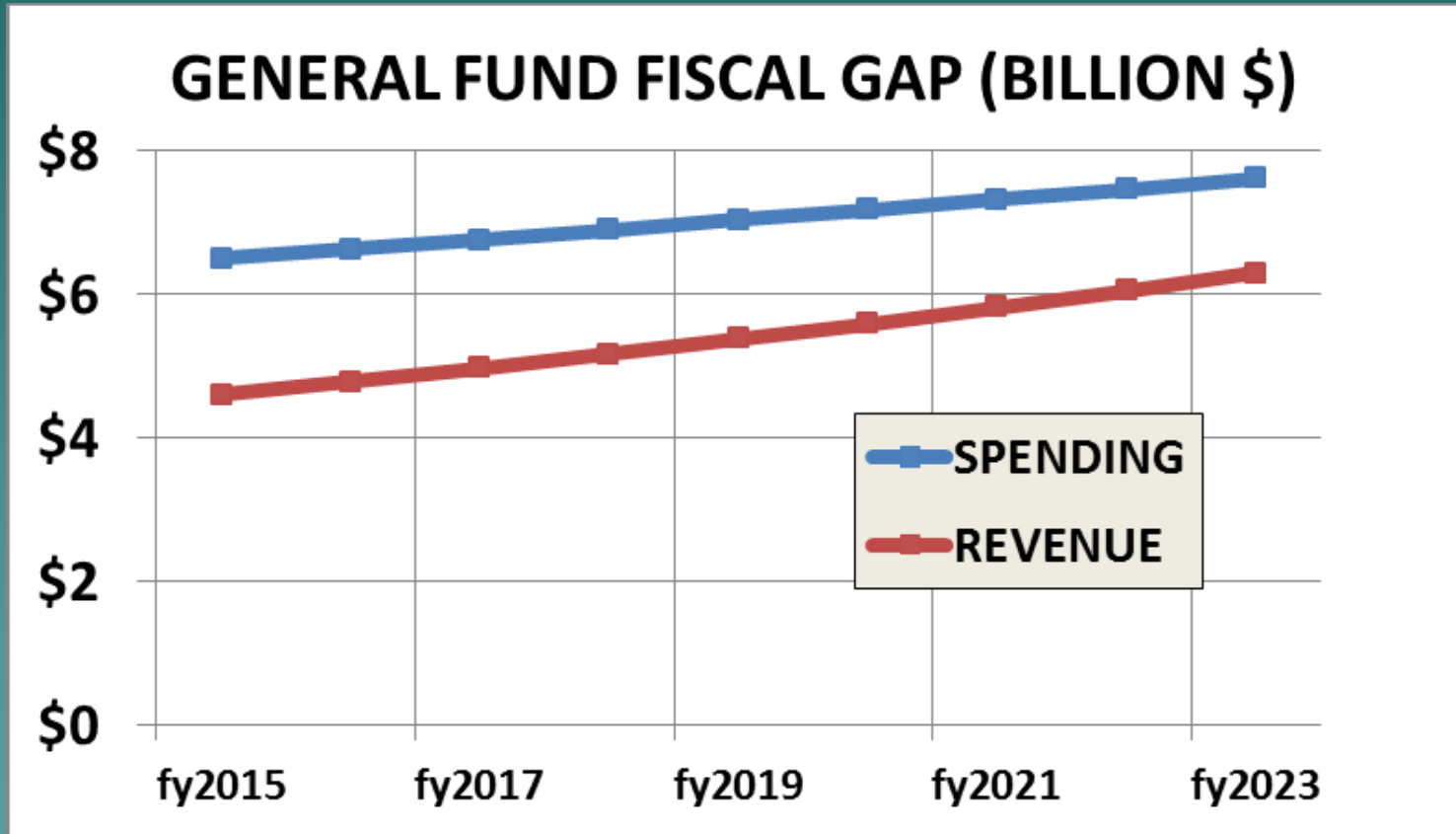
Source URL: <http://www.alaskadispatch.com/article/report-alaska-faces-budget-shortfall-fy-2013-and-beyond>

JANUARY 15, 2013

REPORT: ALASKA FACES BUDGET SHORTFALL IN FY 2013 AND BEYOND

"...at the close of the 2012 session, lawmakers projected a \$490 million surplus for FY13. However, due to declining oil production and lower-than-projected oil prices, Alaska now faces a \$410 million deficit for FY13."

No Production Tax is a Silver Bullet against the Fiscal Gap



Production Tax 101

**TAX BASE =
PRODUCTION TAX VALUE (PTV) =**

(Market Price * Production) –
Transportation Costs – Royalties –
Lease Costs

TAX LIABILITY =

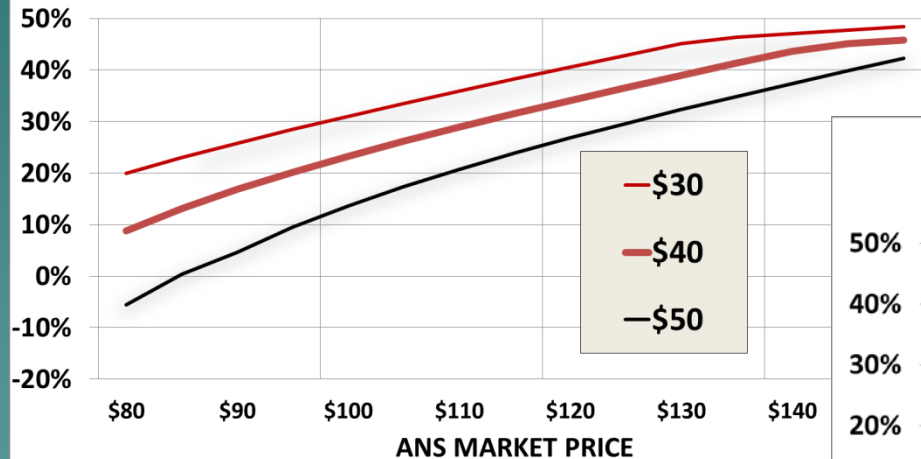
nominal tax rate * PRODUCTION TAX VALUE –
TAX CREDITS

ACES vs MAPA

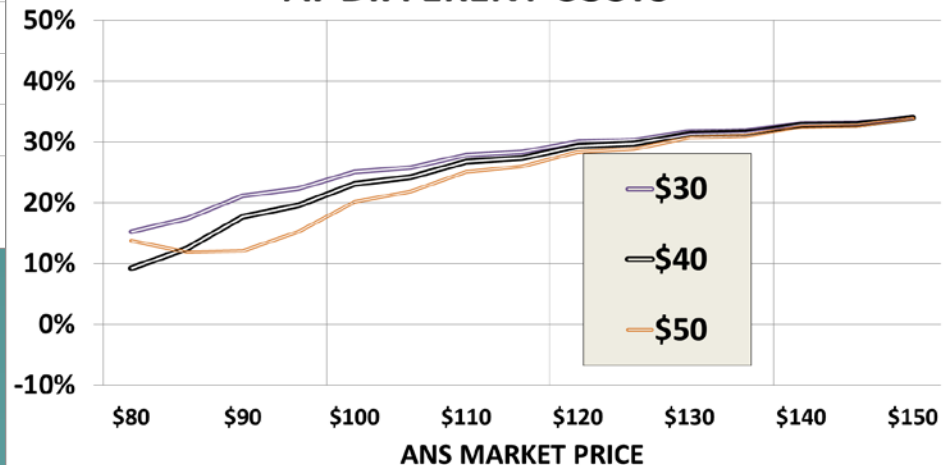
	ACES	MAPA
Nominal Tax Rate	25% - 75%	35%
Credits	Capital Costs	Production
Some New Oil	No adjustments	Reduced tax base (GVR)

Effective Tax Rates Vary with Price and Cost

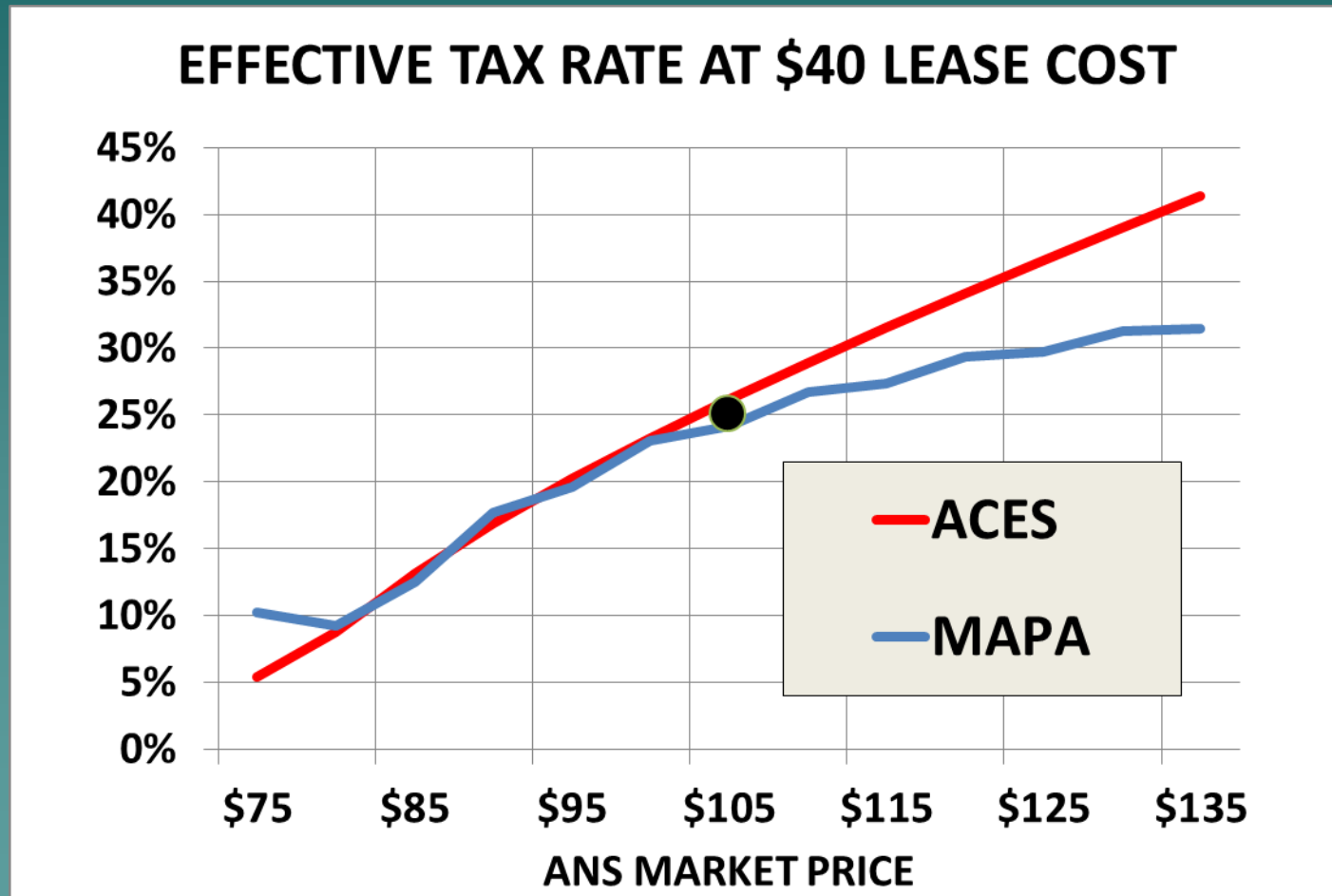
**ACES: EFFECTIVE TAX RATES
AT DIFFERENT COSTS**



**MAPA: EFFECTIVE TAX RATES
AT DIFFERENT COSTS**

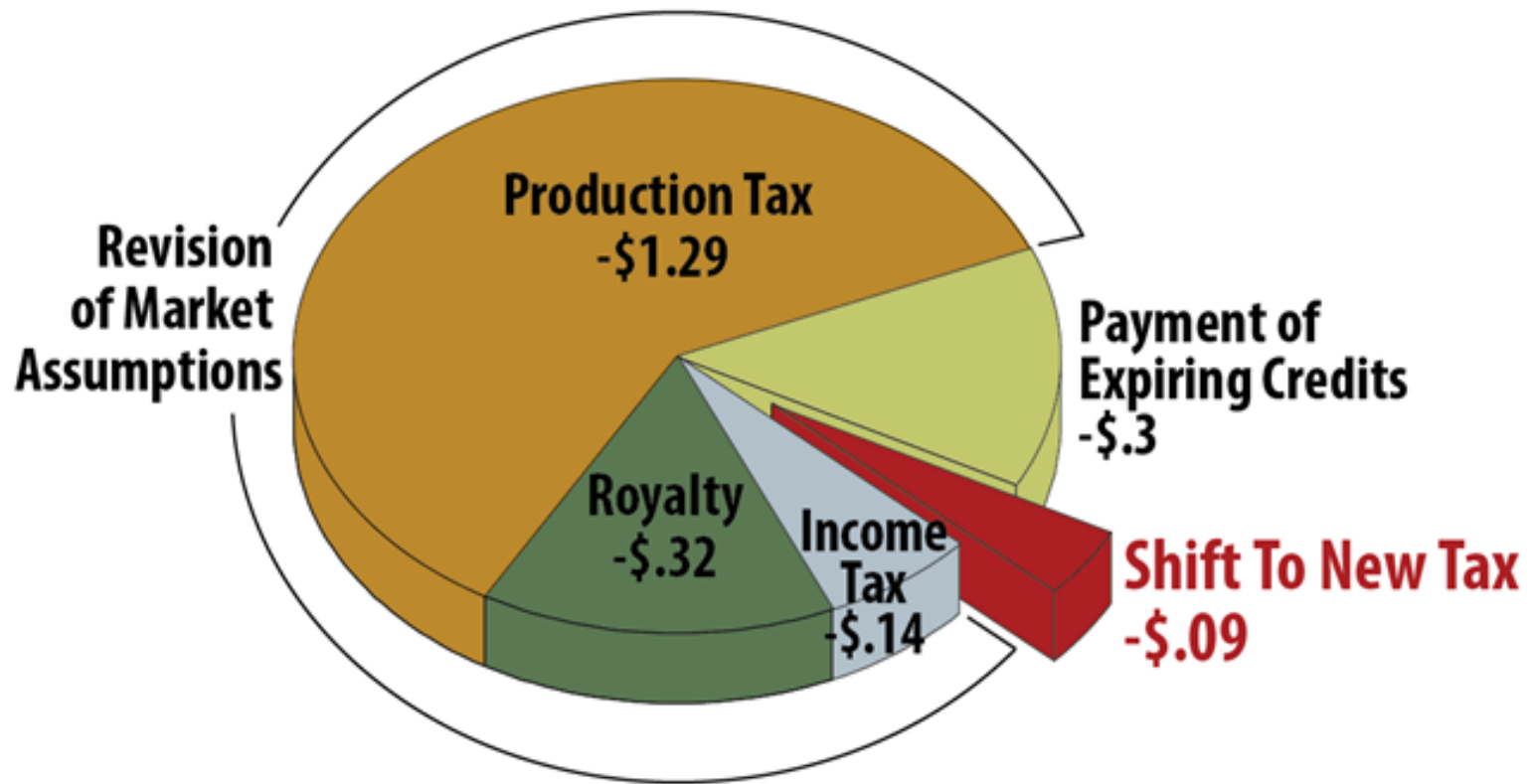


Estimated Effective Tax Rates This Year (FY2014)



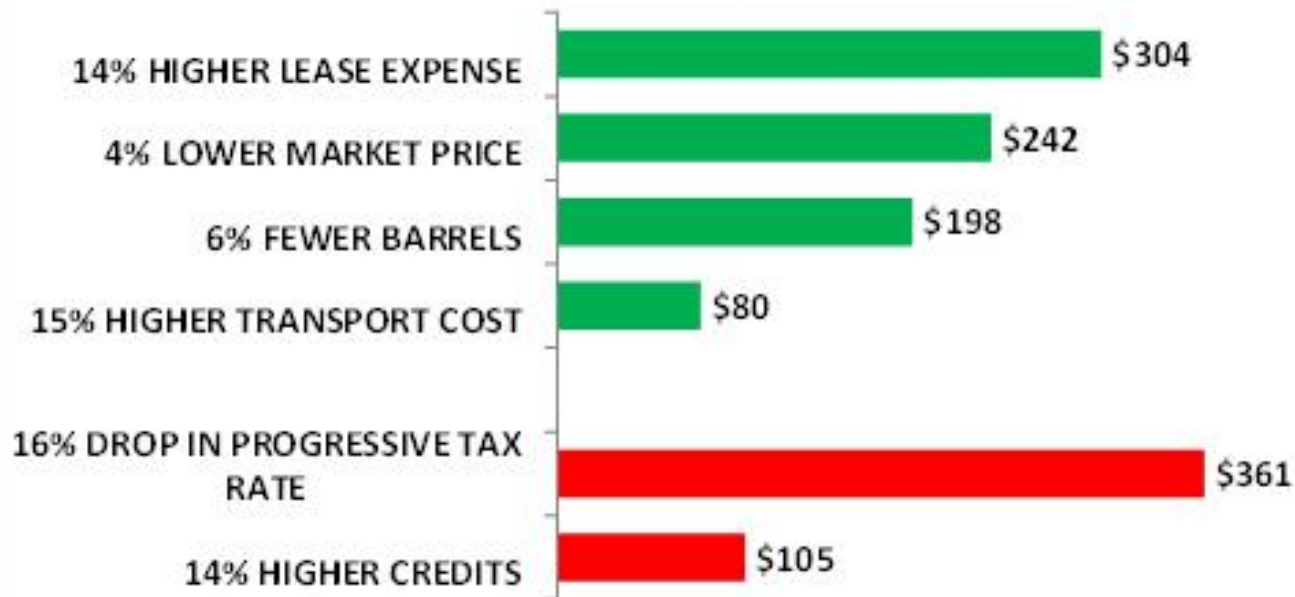
The Disappearing “Giveaway”

The Disappearing Billions: What Happened to \$2.1 Billion in Expected Oil Tax Revenue in FY 2014?



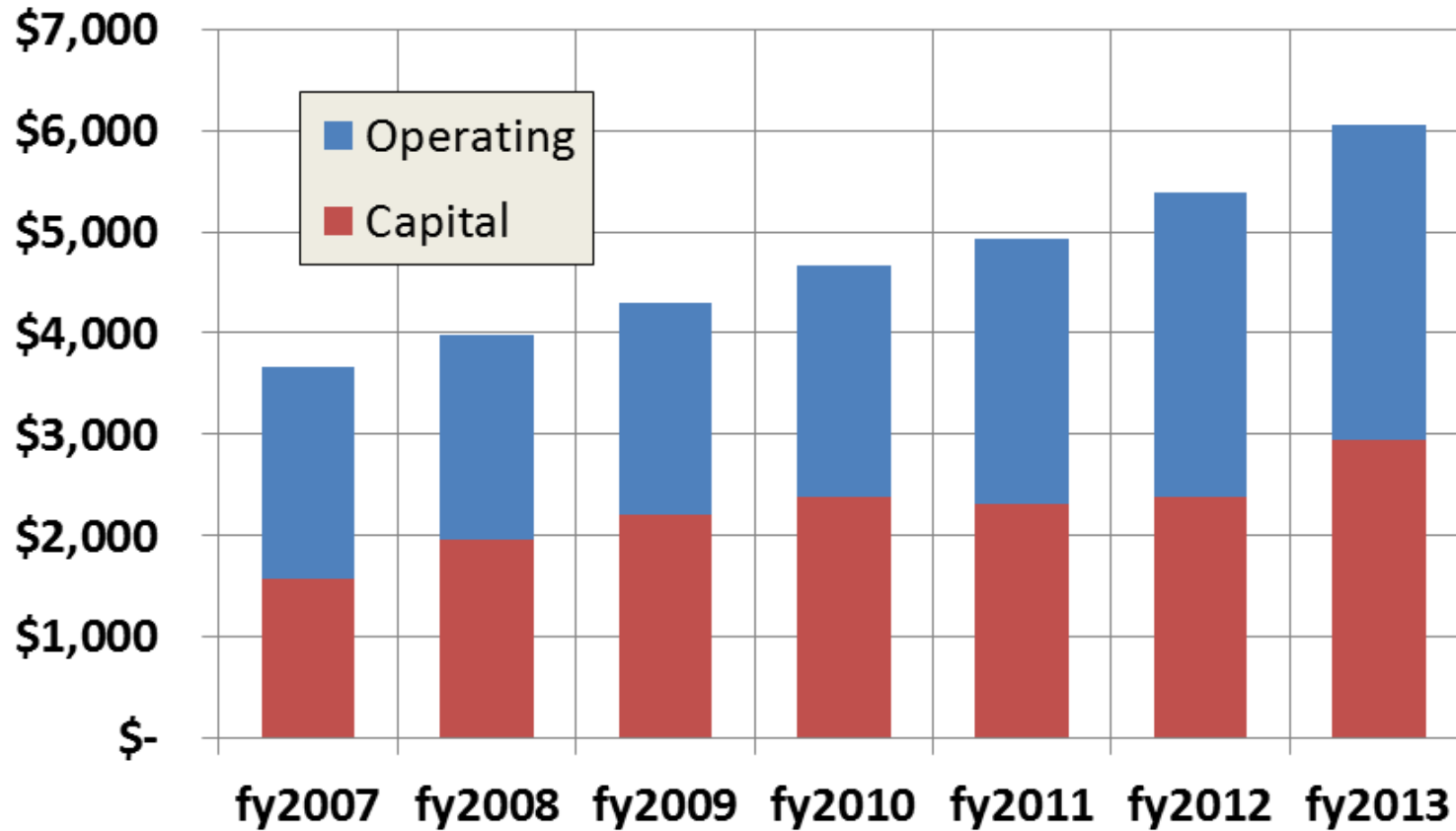
Why Did the Production Tax Projection Fall \$1.29 Billion?

WHAT EXPLAINS THE \$1.29 BILLION DROP IN FORECASTED FY 2014 PRODUCTION TAX REVENUE (Million \$)

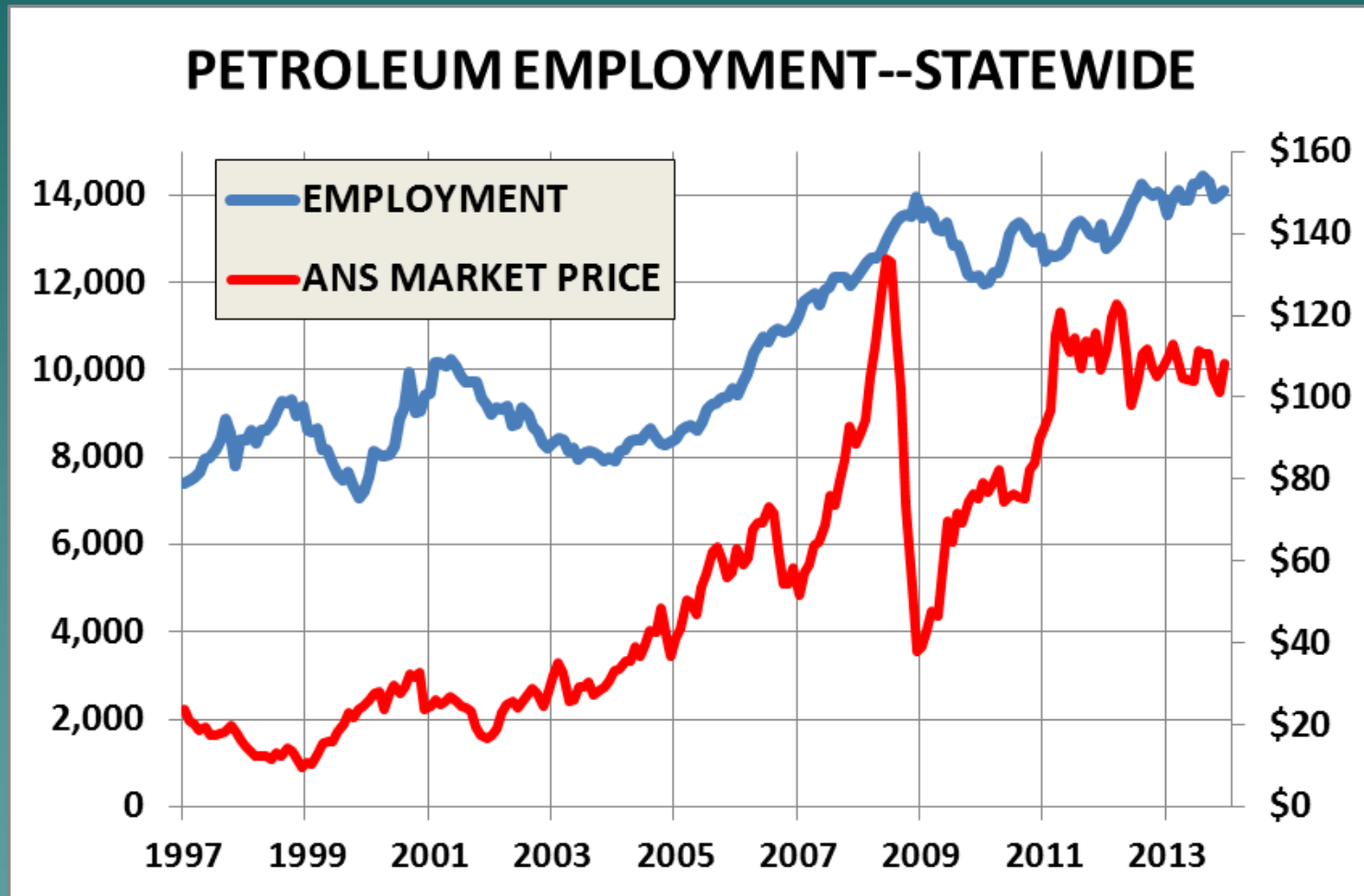


Oil Patch Spending

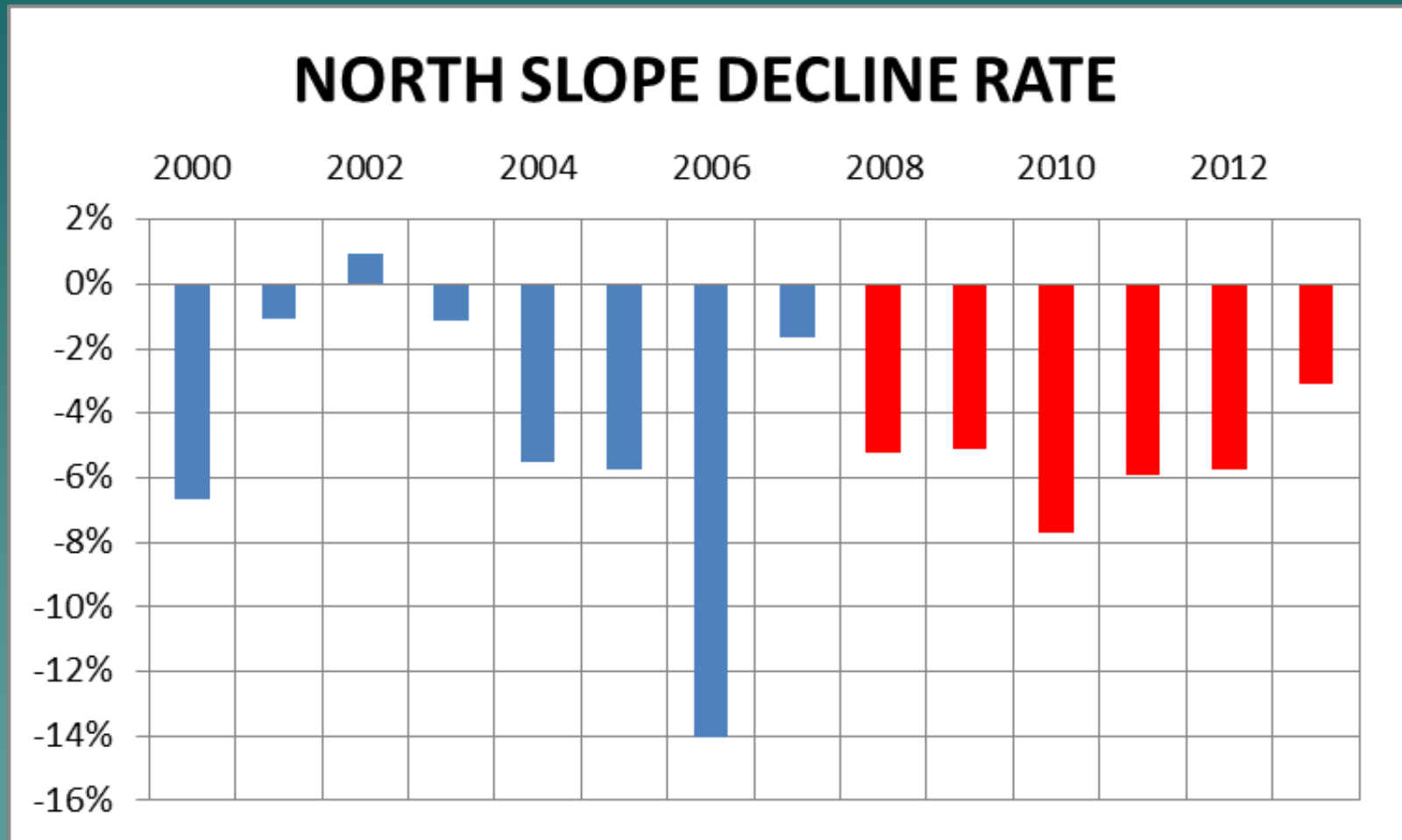
NORTH SLOPE LEASE EXPENDITURES (MILL \$)



Oil Patch Employment



North Slope Production Decline



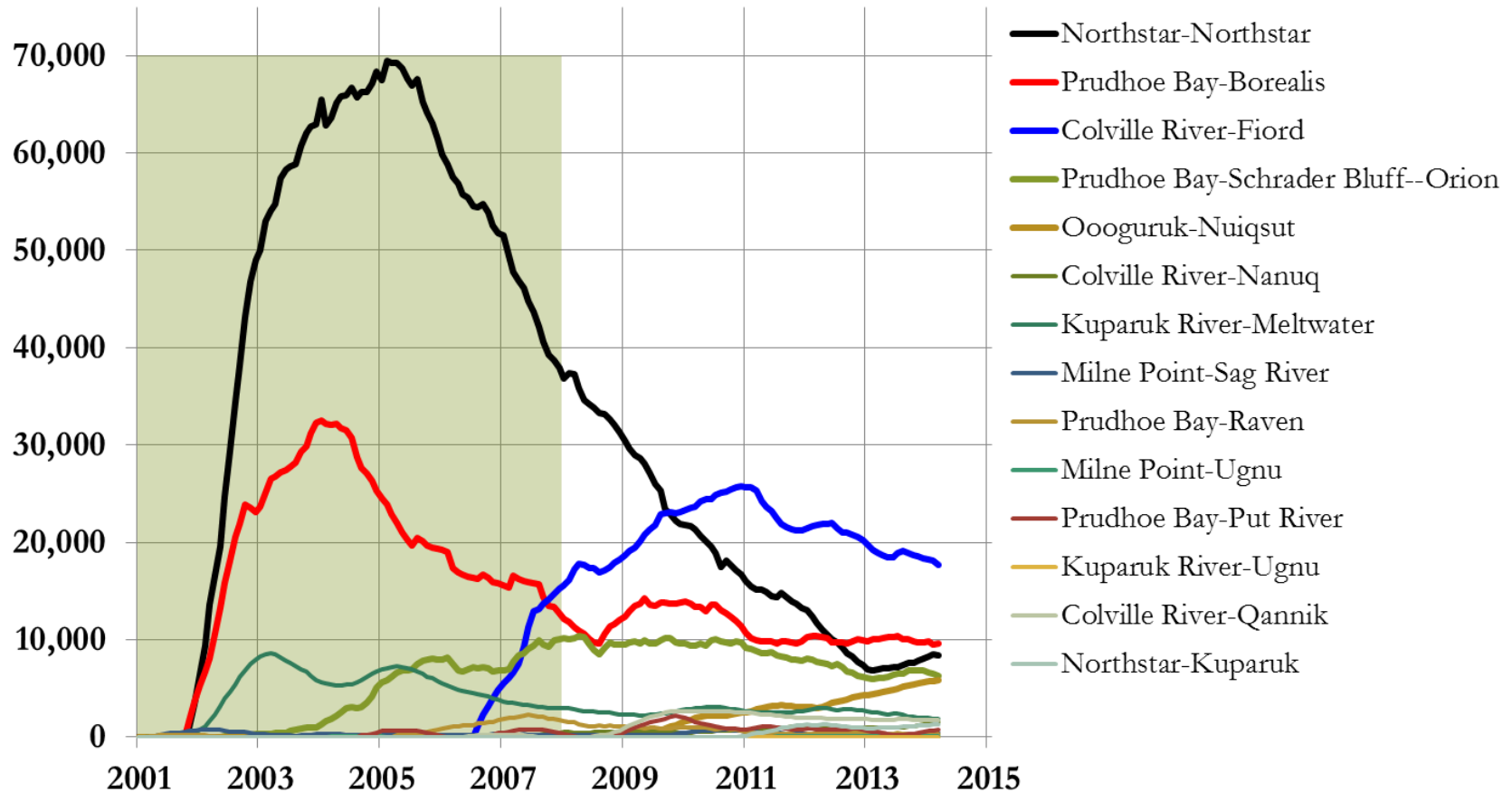


Other Indicators of Activity in the Oil Patch

- Permits
- Wells Drilled
- New Entrants

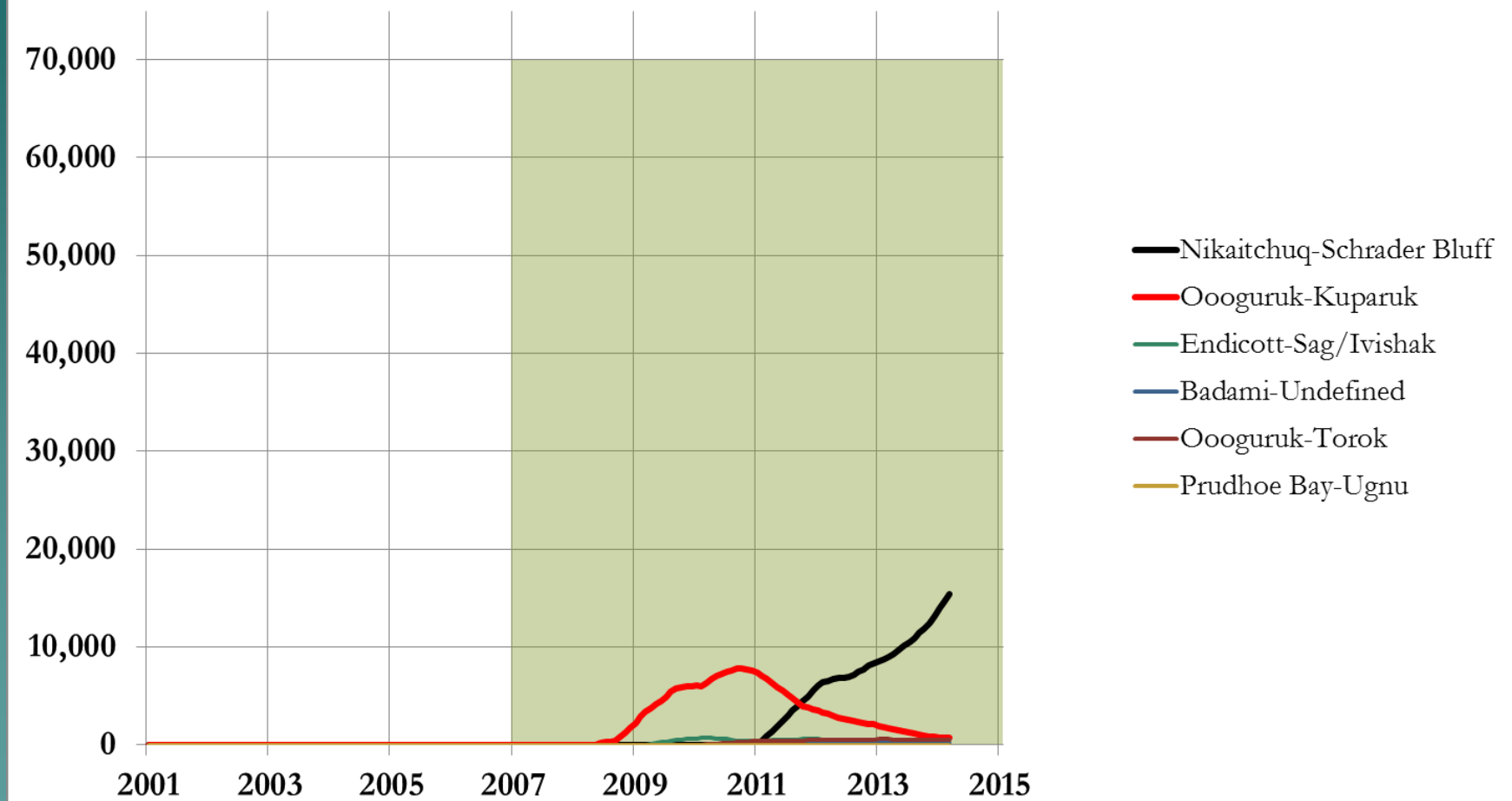
New Pools before ACES

14 NEW POOLS 2000-2007: DETAIL



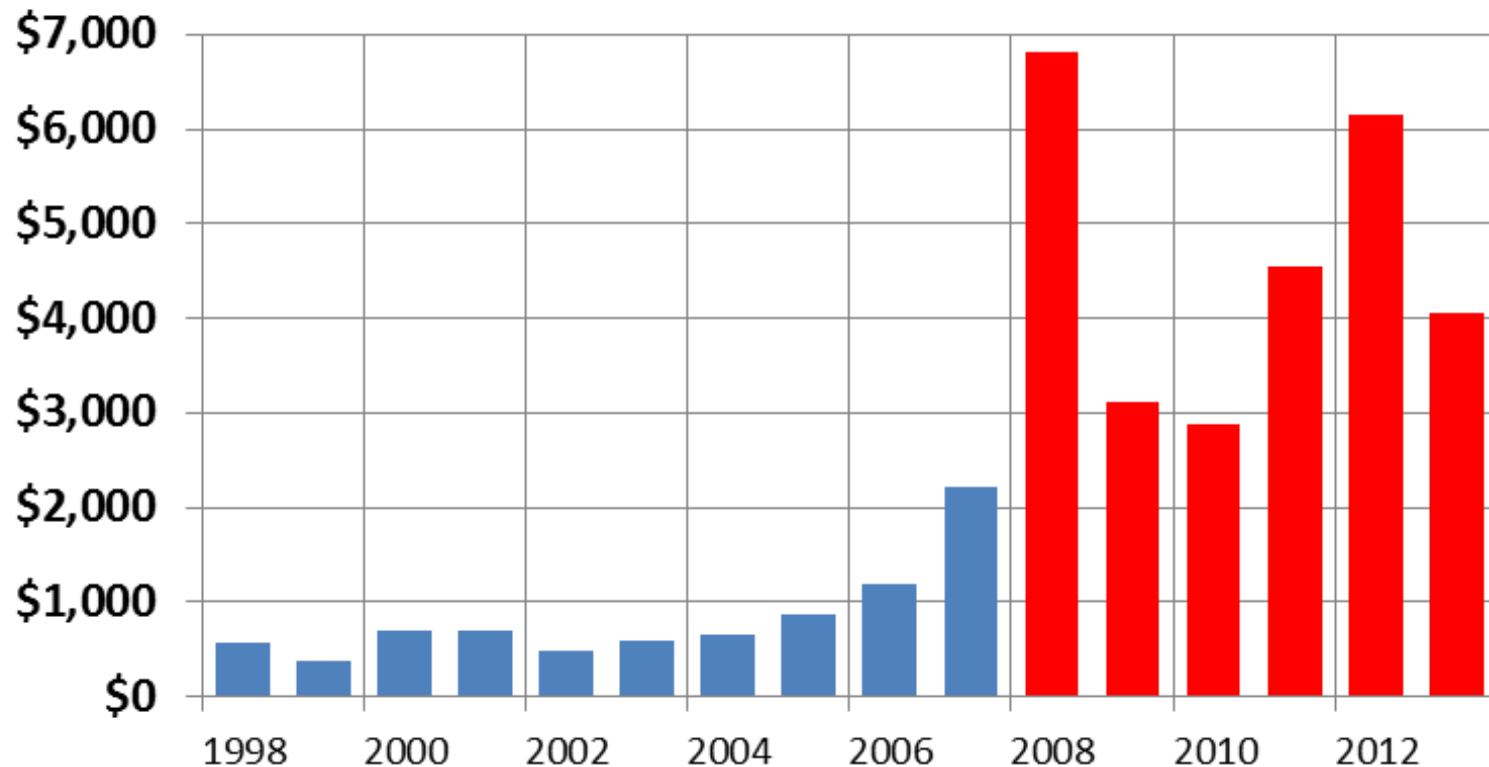
New Pools during ACES

6 NEW POOLS SINCE 2007: DETAIL

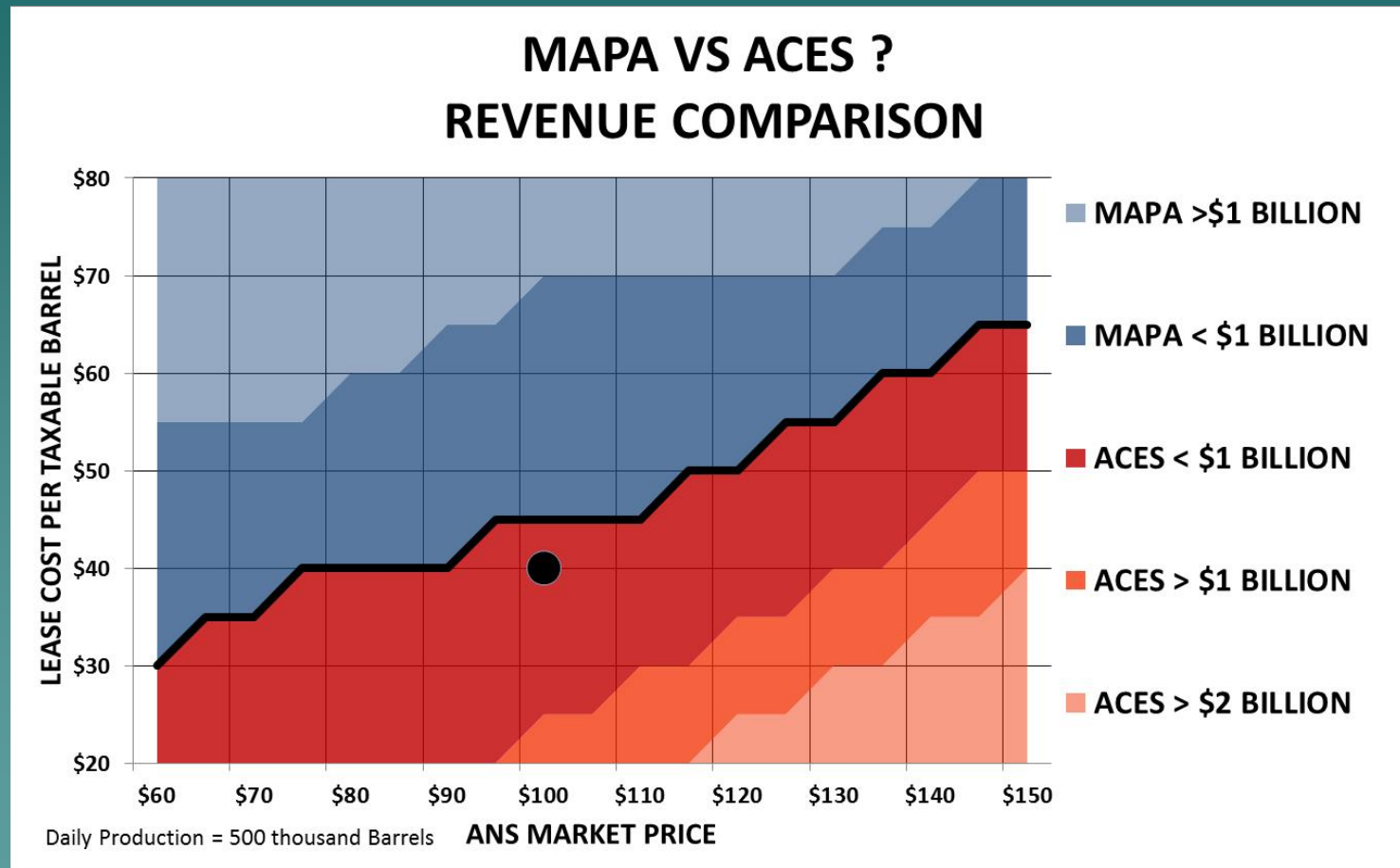


Billions in Revenue

PRODUCTION TAX REVENUE (Million \$)



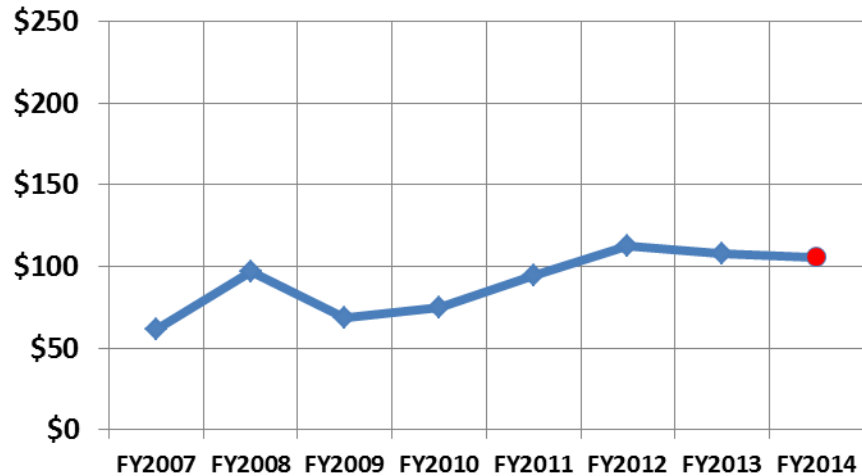
Production Tax: Price and Cost Sensitivity



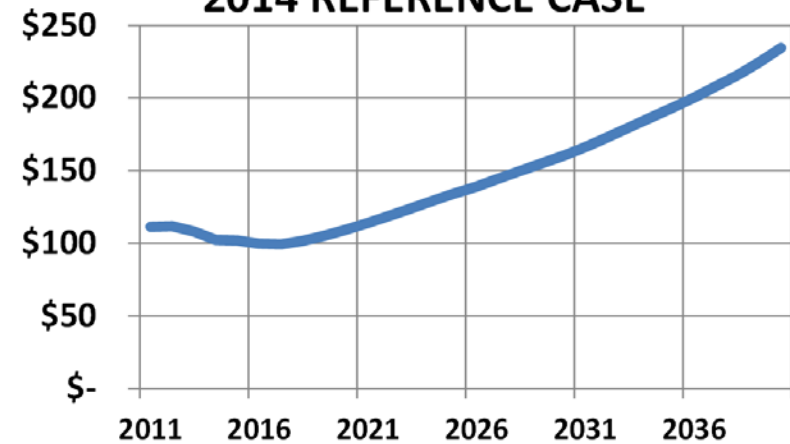
Oil Price: History and Projection

3%

ANS MARKET PRICE



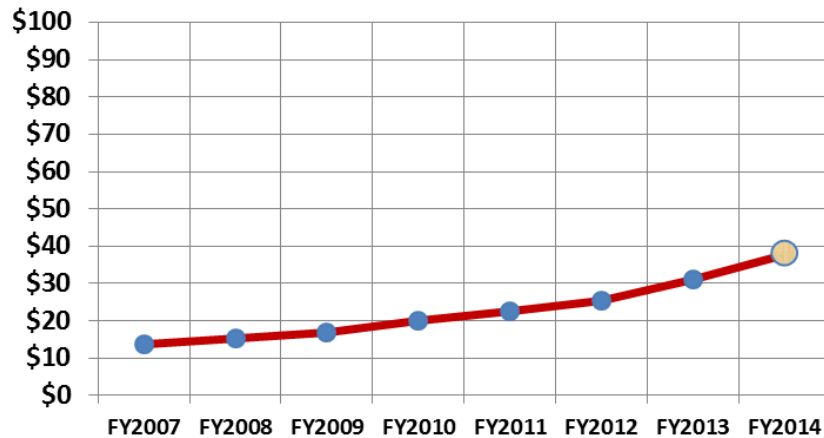
**EIA OIL PRICE PROJECTION:
2014 REFERENCE CASE**



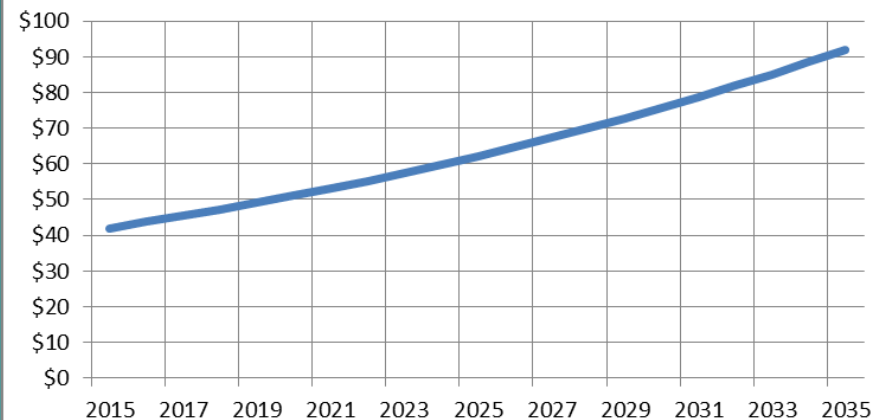
Lease Cost per Barrel: History and Projection

4%

NS LEASE EXPENDITURES PER BARREL

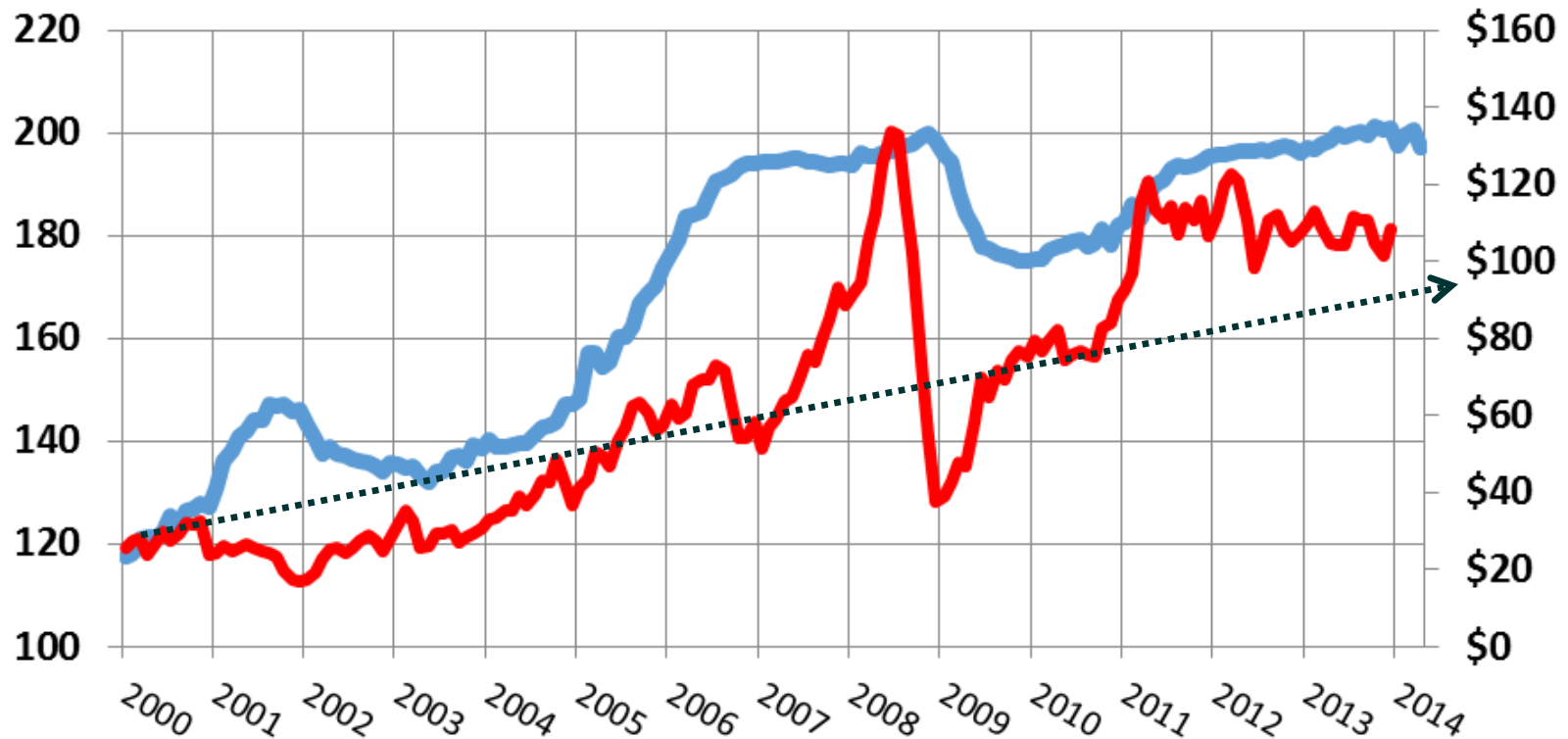


NS LEASE EXPENDITURES PER BARREL

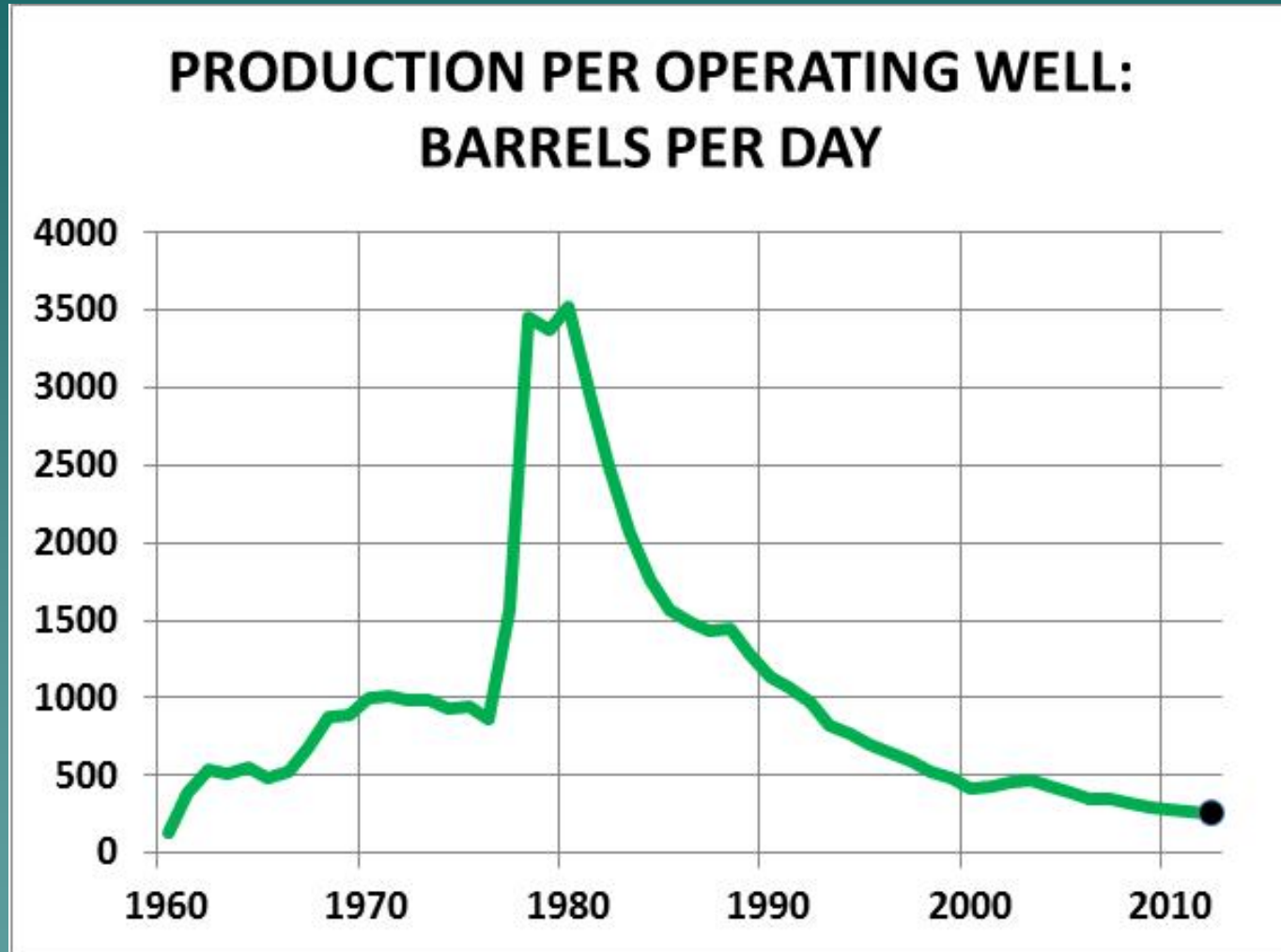


Petroleum Production Cost Index

PRODUCER PRICE INDEX: SUPPORT ACTIVITIES FOR OIL AND GAS OPERATIONS

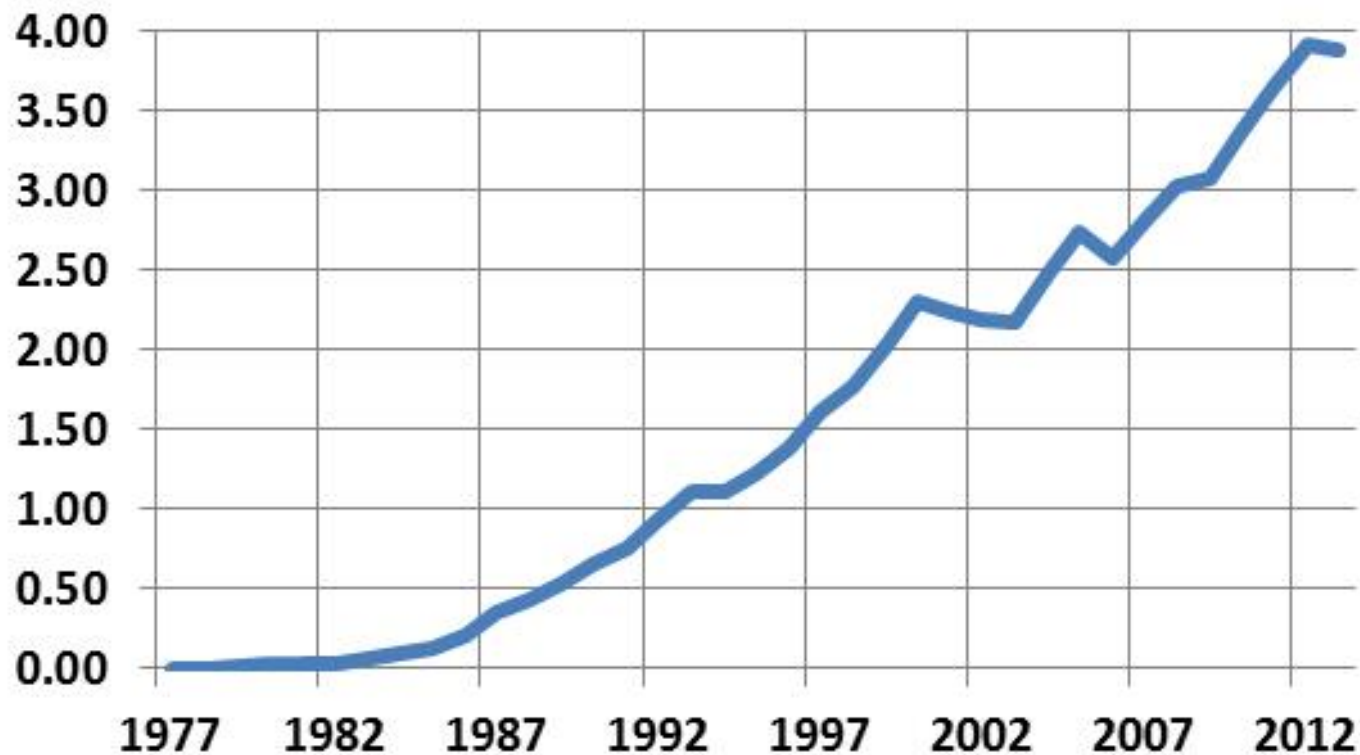


Daily Production: Average Ak Well

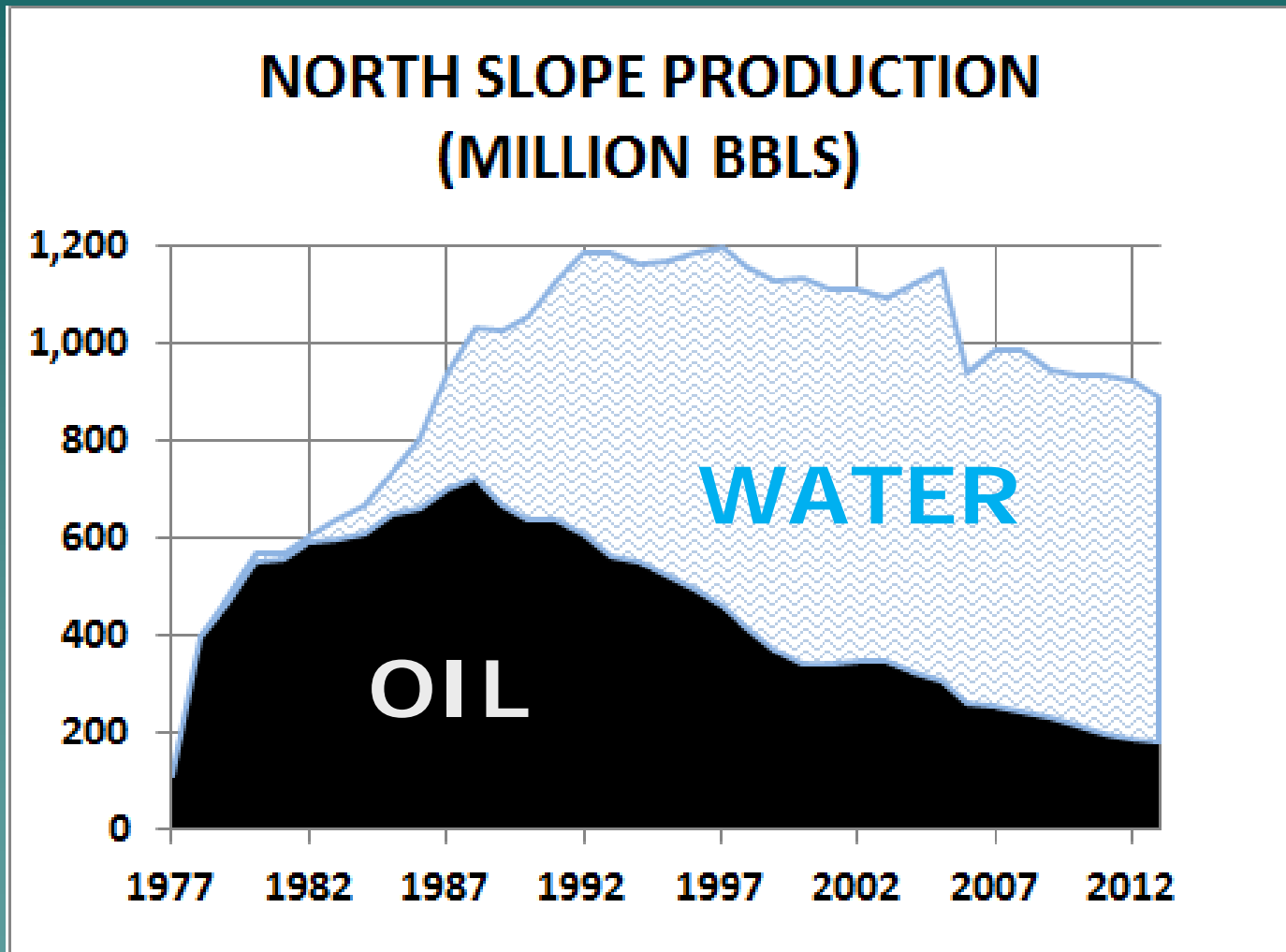


Water to Oil Production Ratio

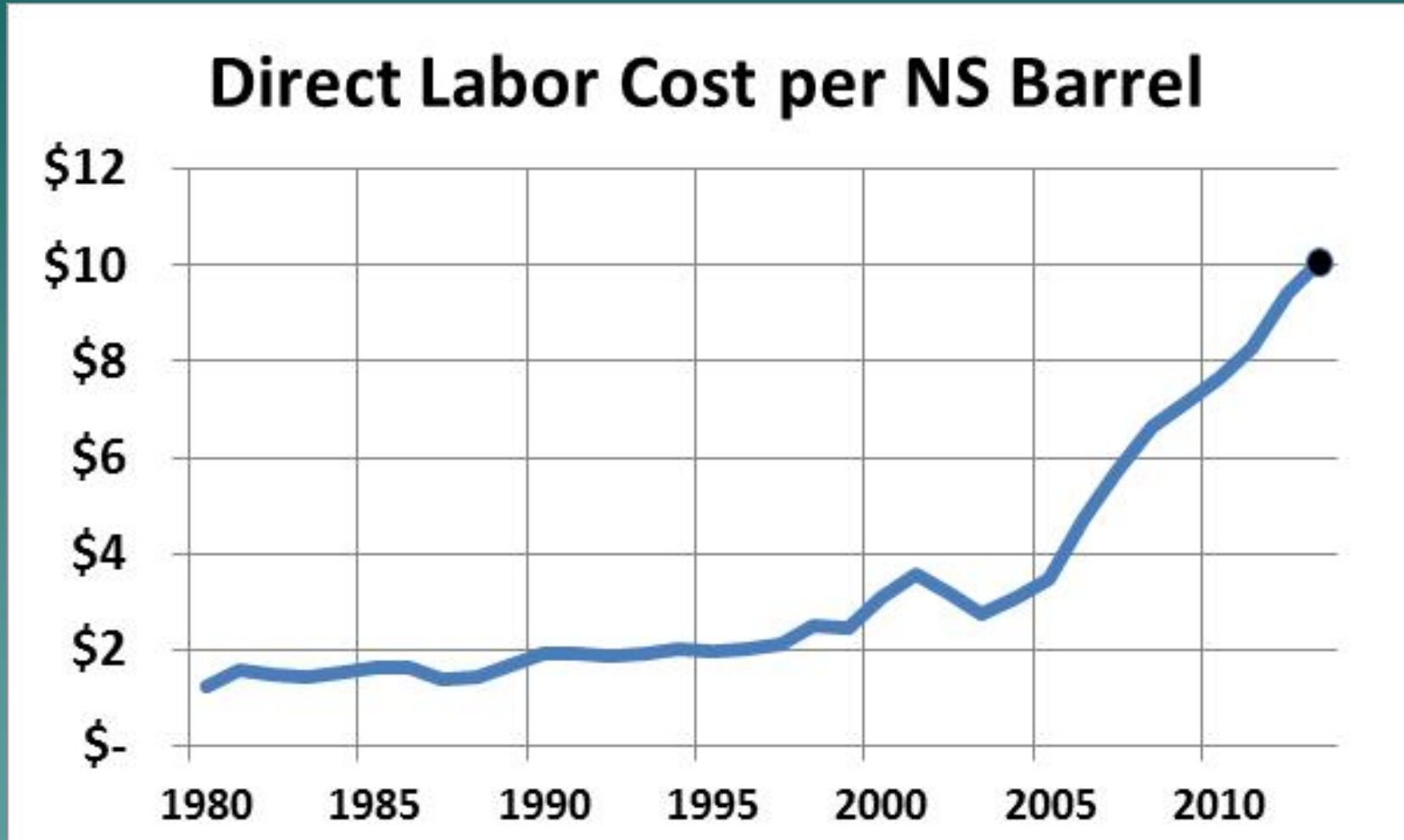
**NORTH SLOPE PRODUCTION:
WATER BARRELS PER OIL BARREL**



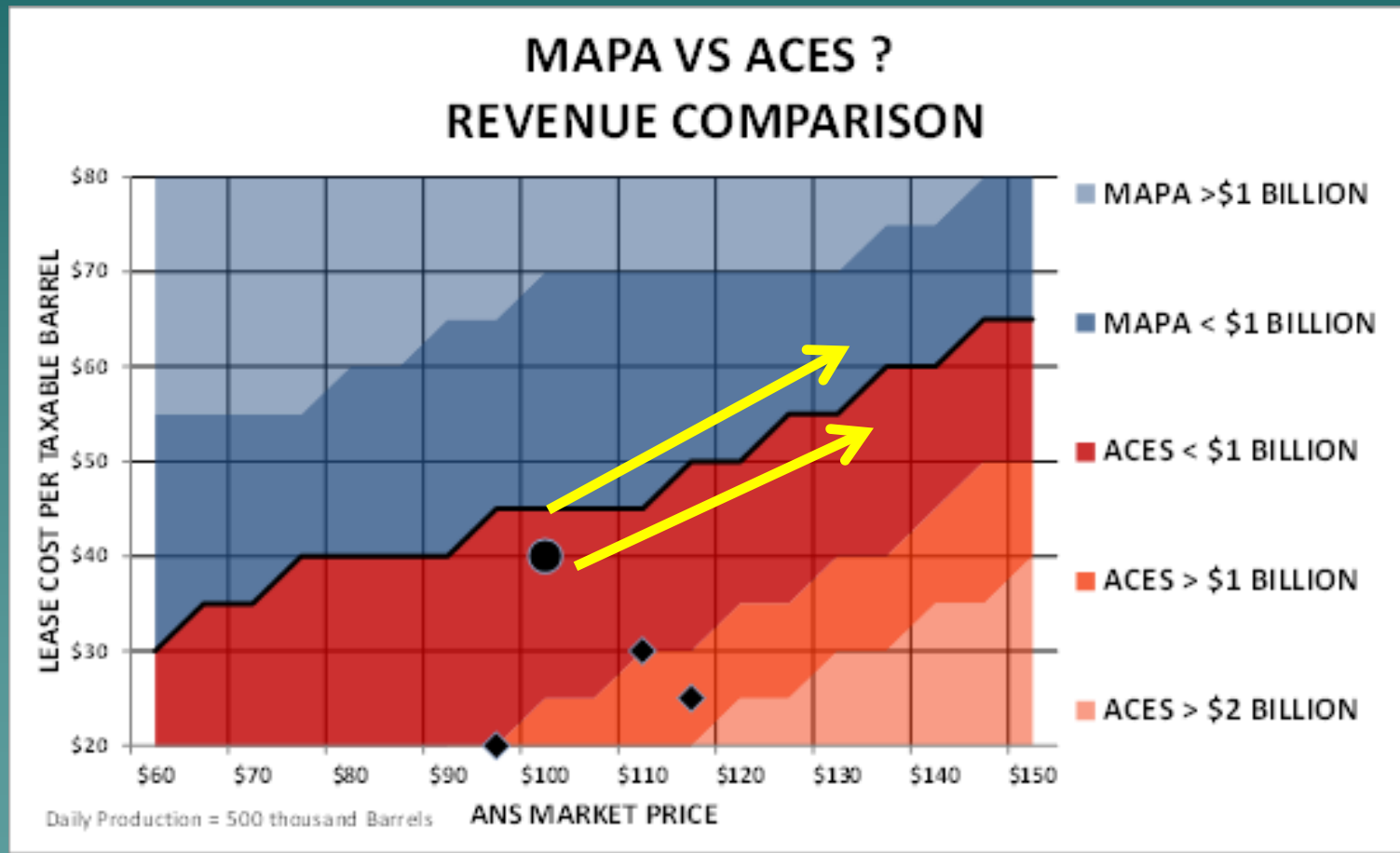
North Slope Production



More Labor to Do the Squeezing

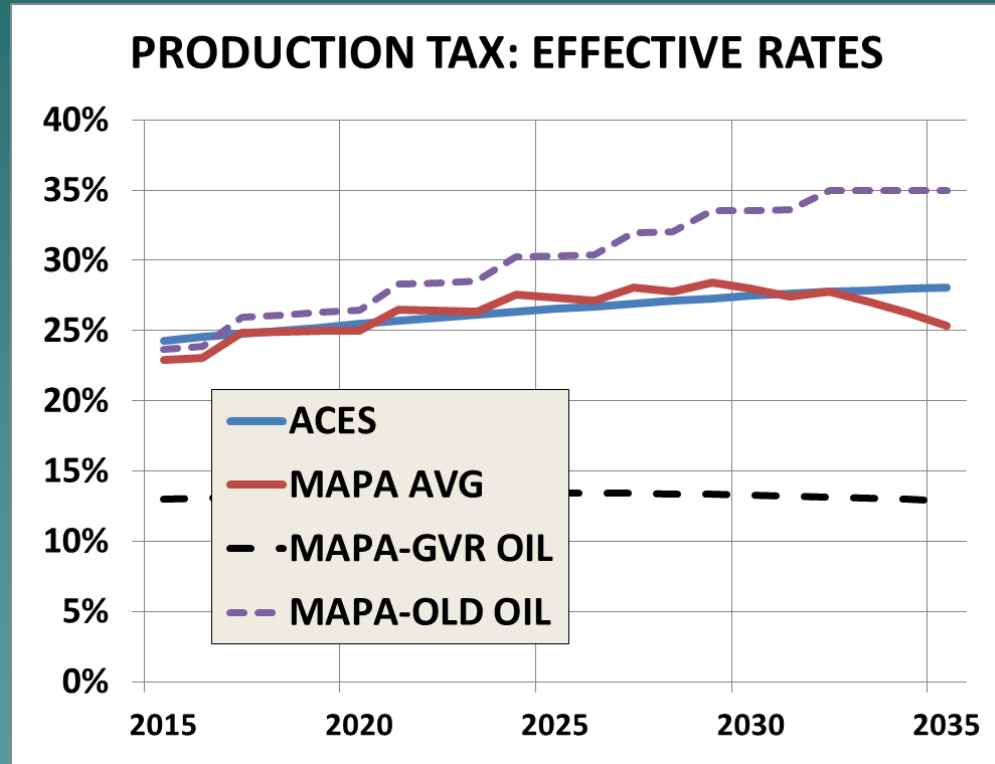


Future Market Direction: My Assumptions



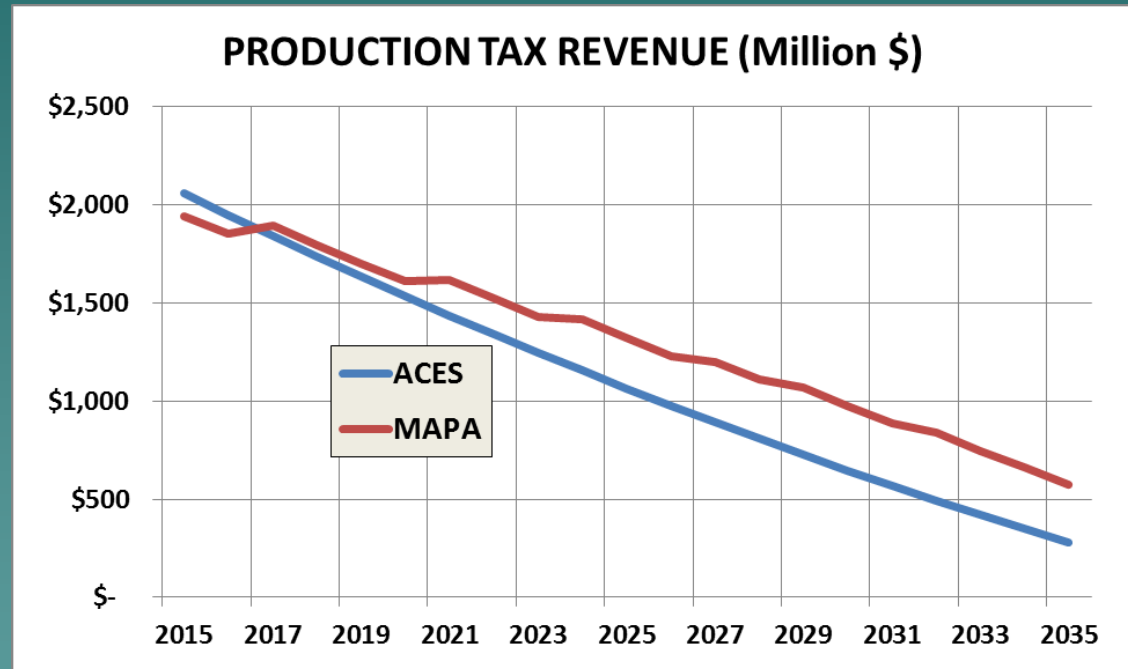
Results: My Assumptions

- Cost \$42 4%
- Price \$105 3%
- ACES \$31 bill
- MAPA \$31 bill
- NPV \$0 bill difference



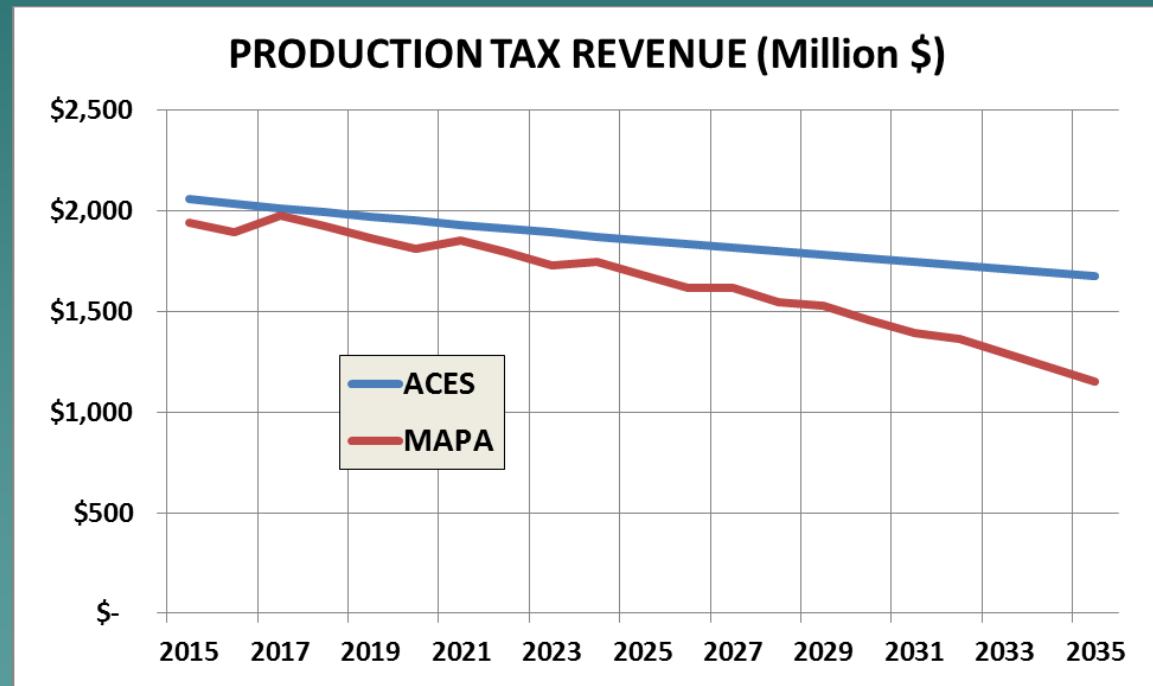
A Case Favoring MAPA

- Cost 5%
- ACES \$23 bill
- MAPA \$27 bill
- NPV \$1.4 bill favor MAPA



A Case Favoring ACES

- Cost 3%
- ACES \$39 bill
- MAPA \$34 bill
- NPV \$1.7 bill favor ACES





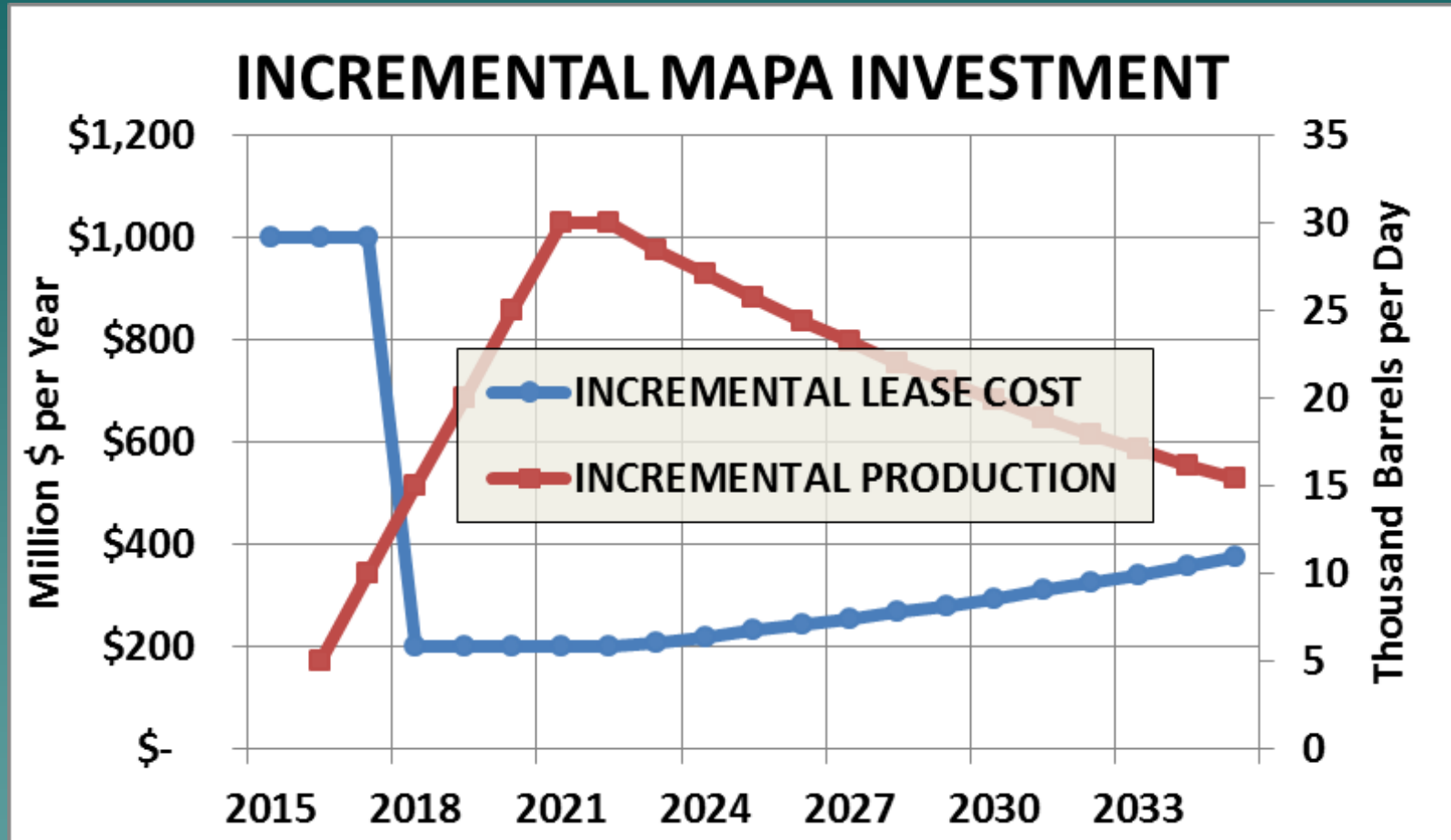
Why Do Producers Favor MAPA ?

TAX MINIMIZATION

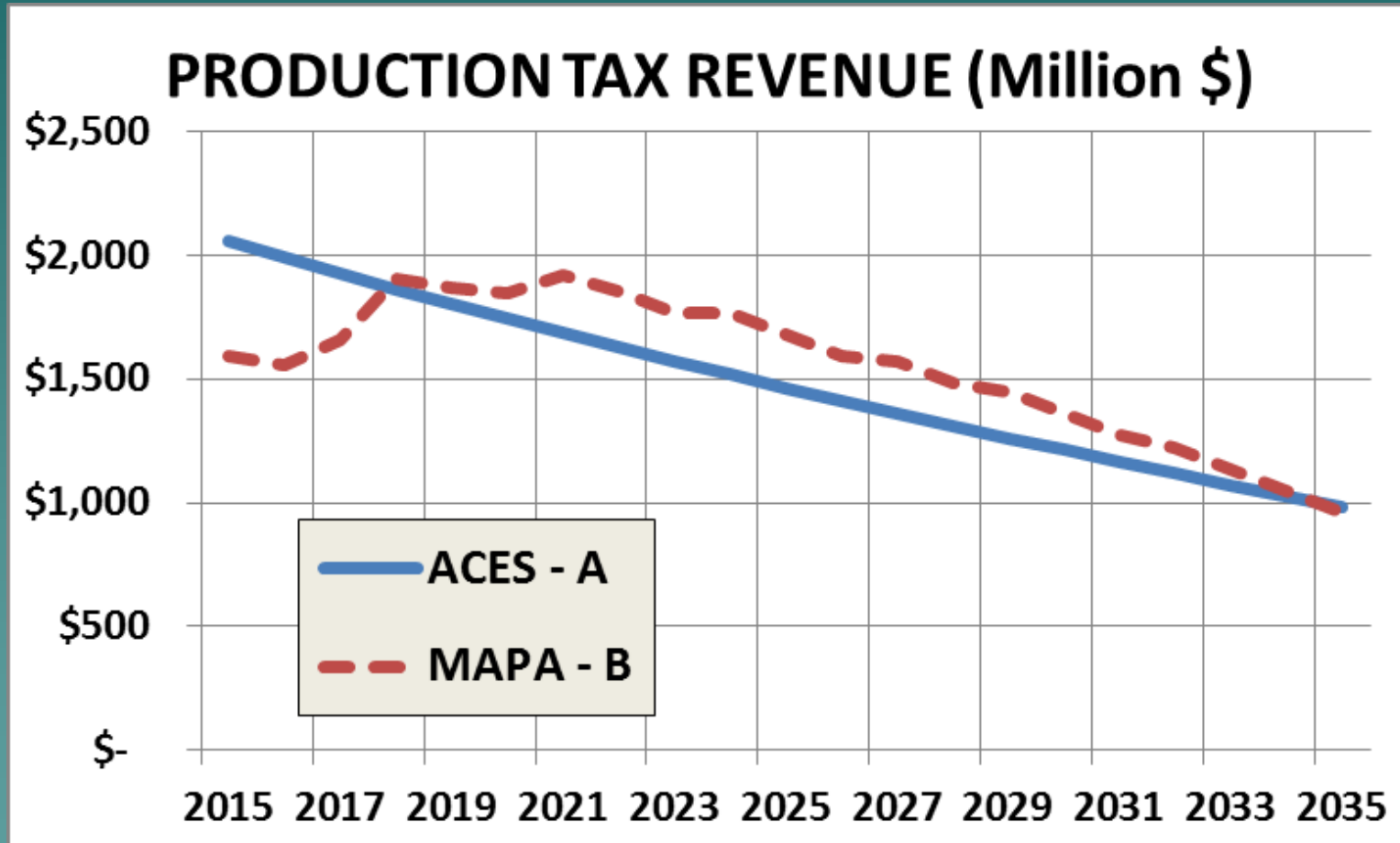
Vs

PROFIT
MAXIMIZATION

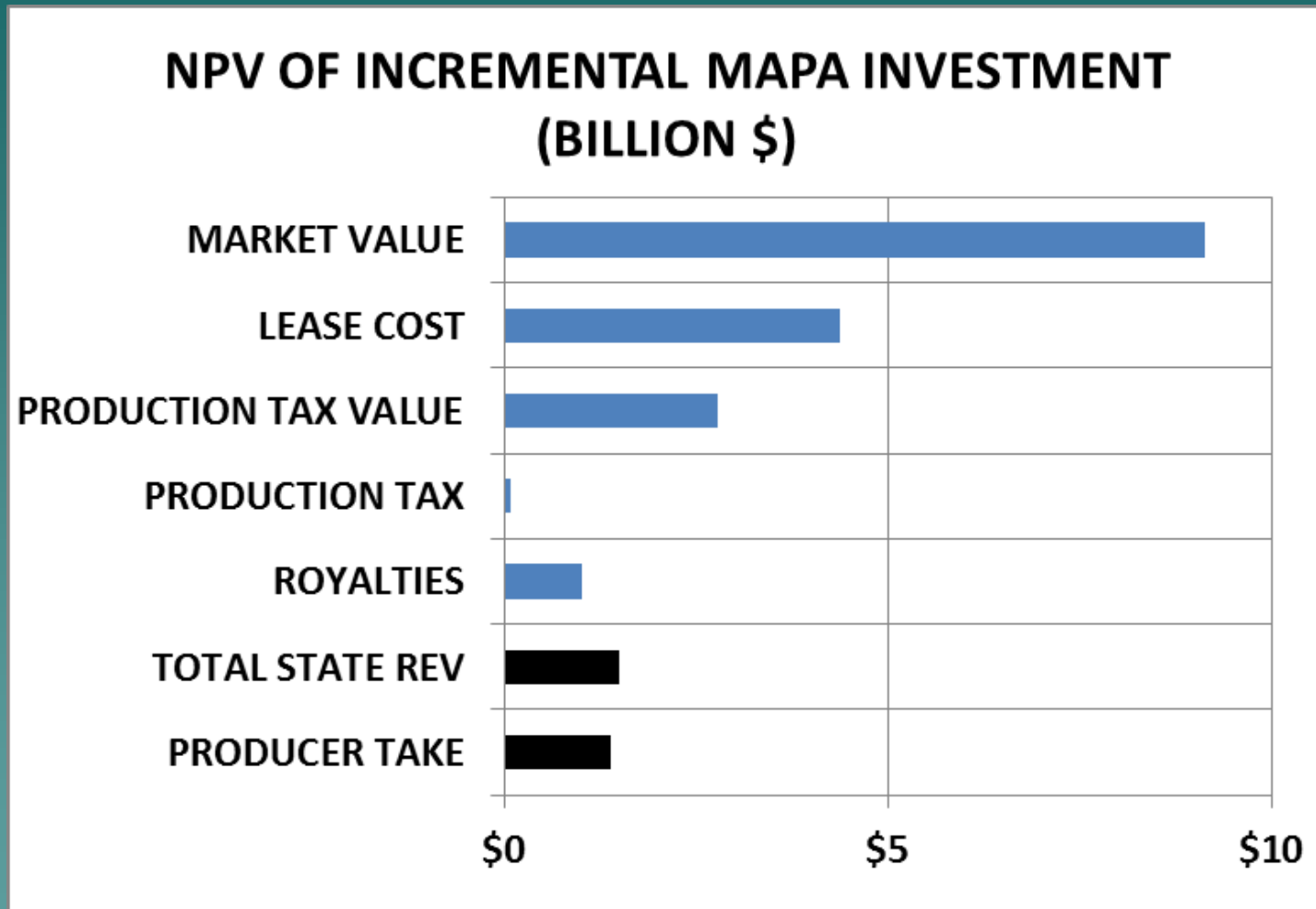
MAPA with Hypothetical New Project



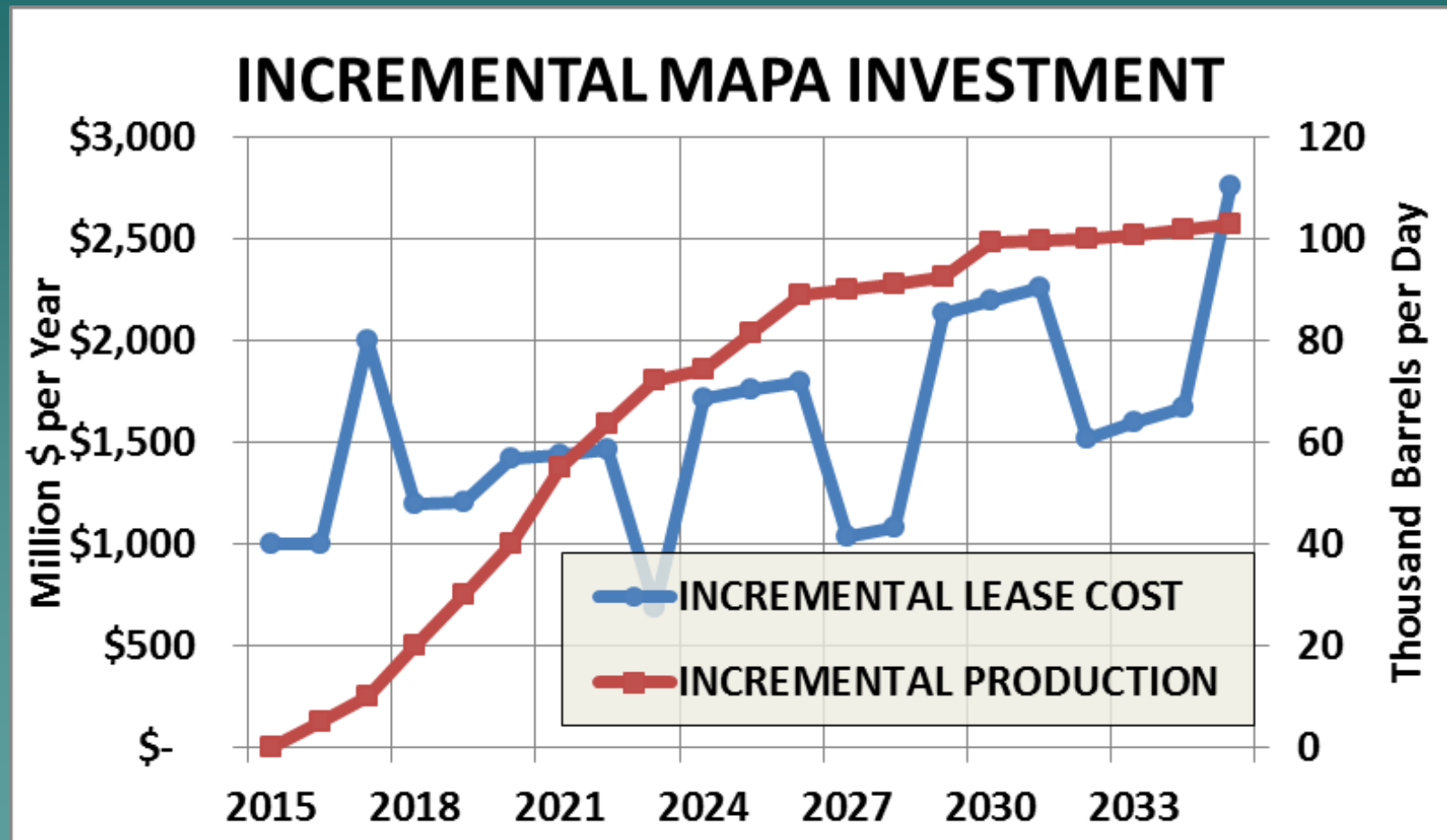
ACES vs MAPA with Hypothetical New Project



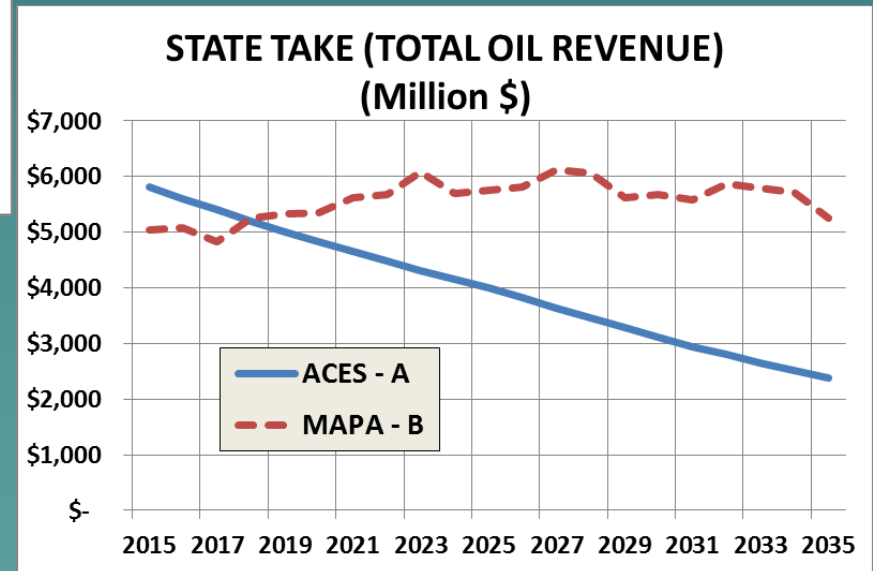
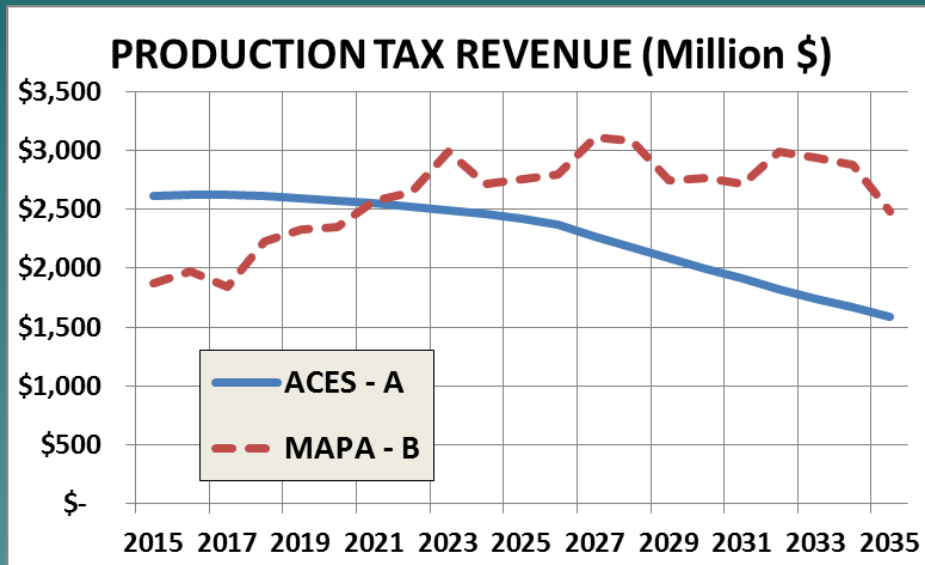
New Investment: Growth of the Pie



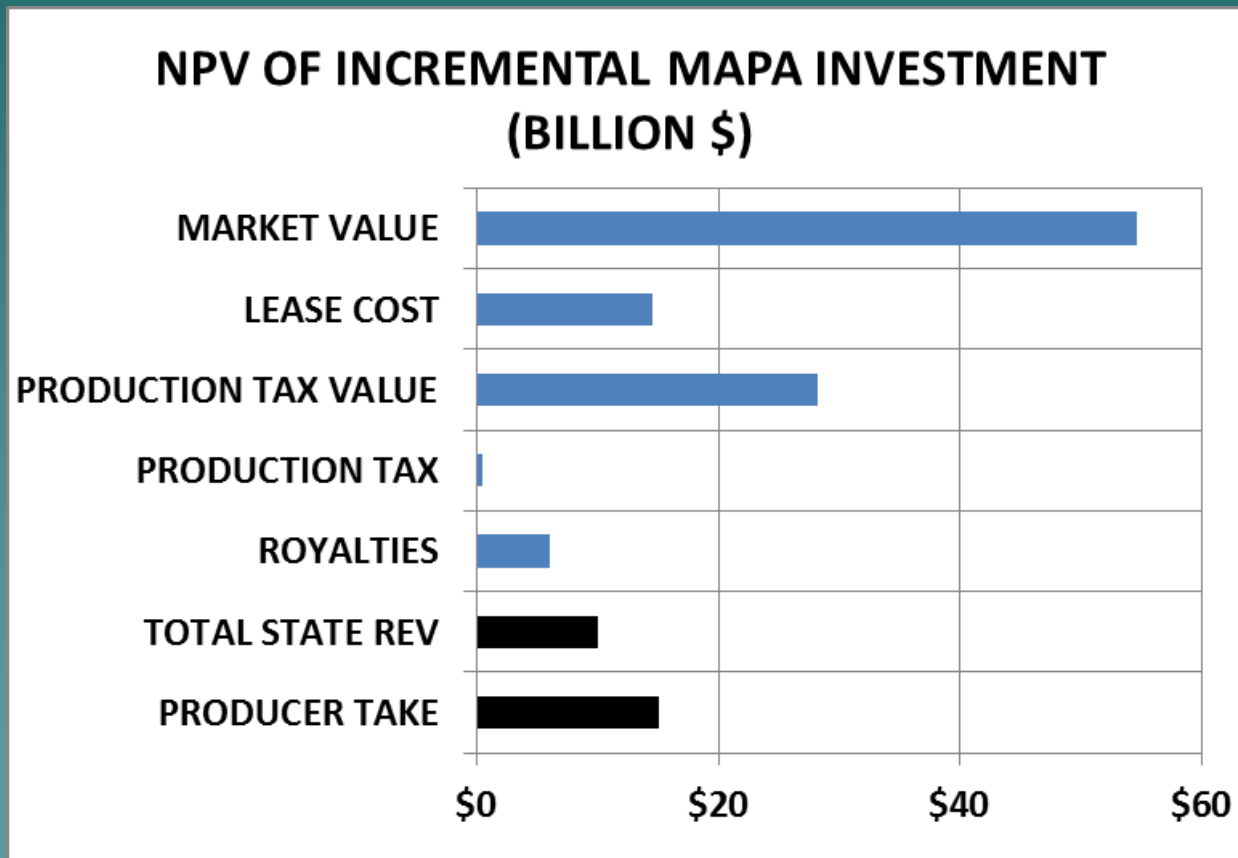
Take the Money Today vs. Sustained New Investment



Take the Money Today vs. Sustained New Investment

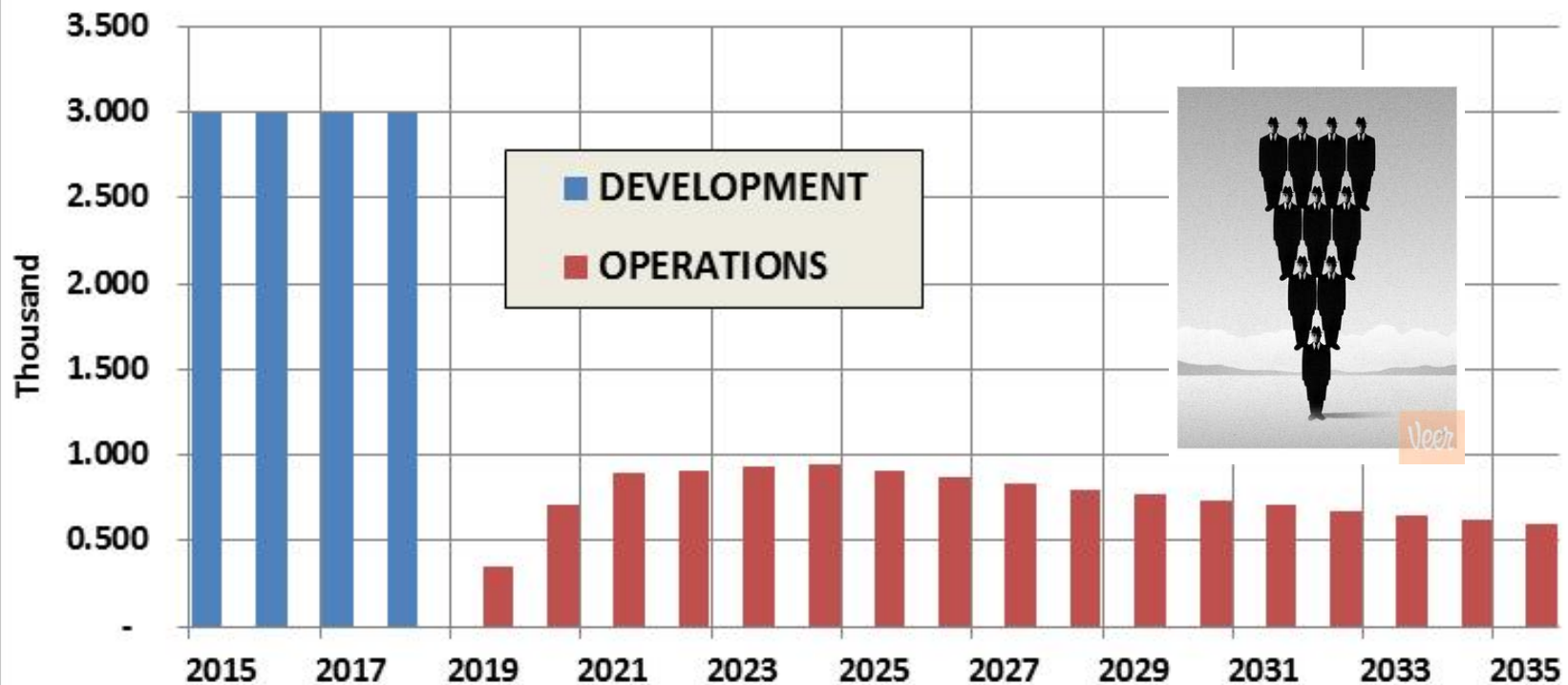


Sustained New Investment: Growth of the Pie



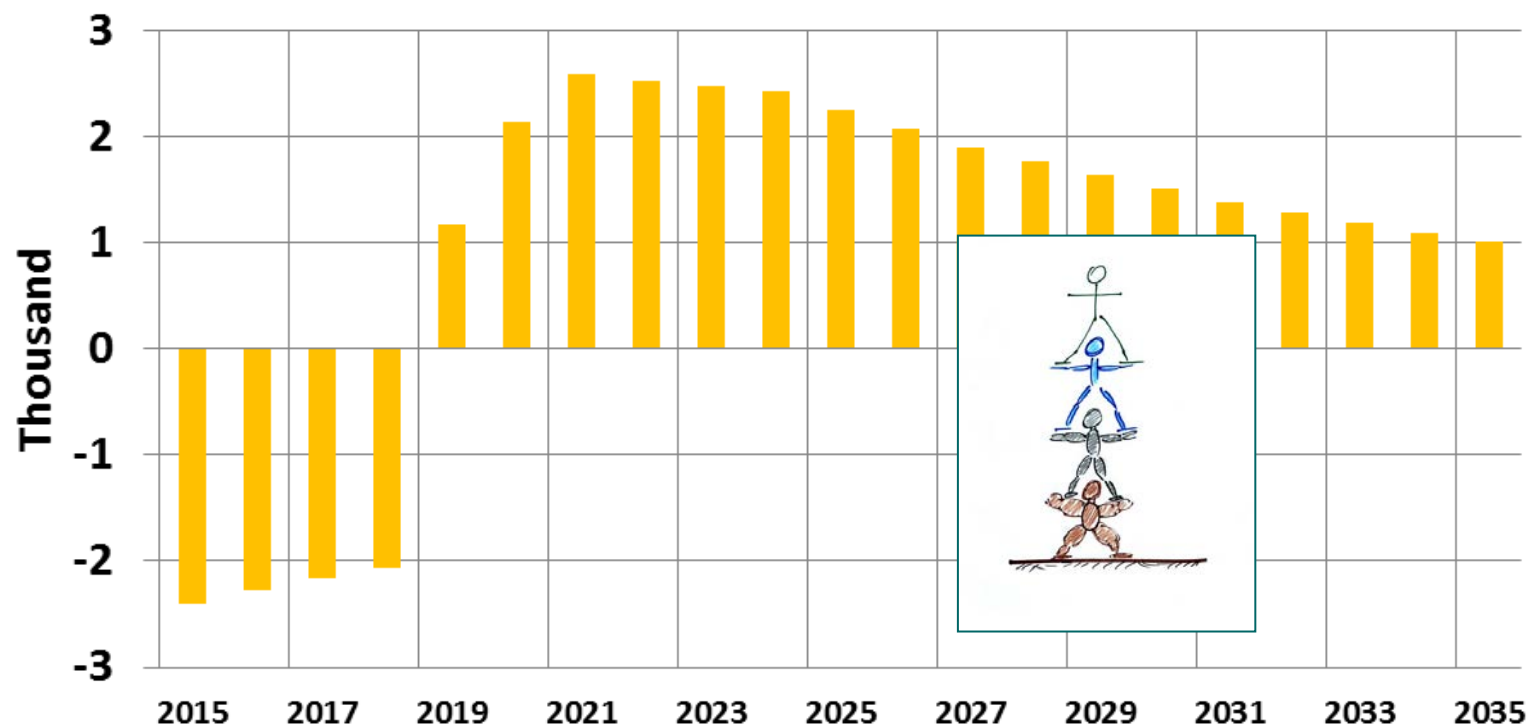
Job Creation in the Oil Patch

NEW INVESTMENT: DIRECT OIL PATCH JOBS



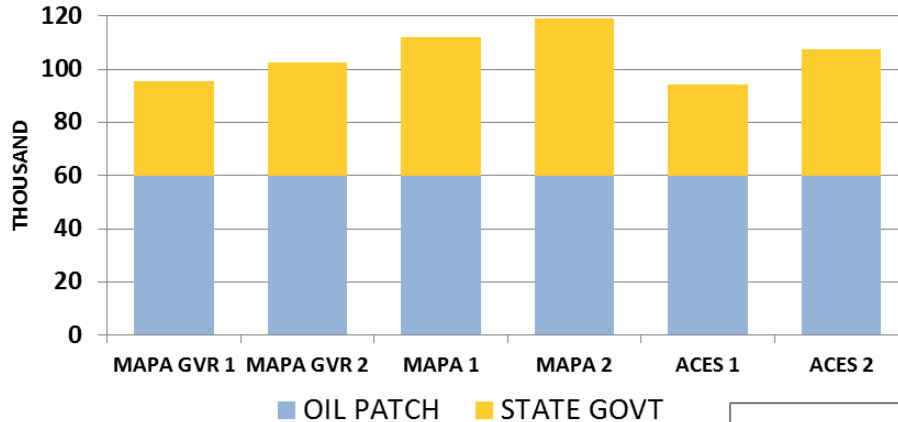
Job Creation from State Revenues

NEW INVESTMENT: PUBLIC JOB CREATION CAPACITY (MAPA - GVR)

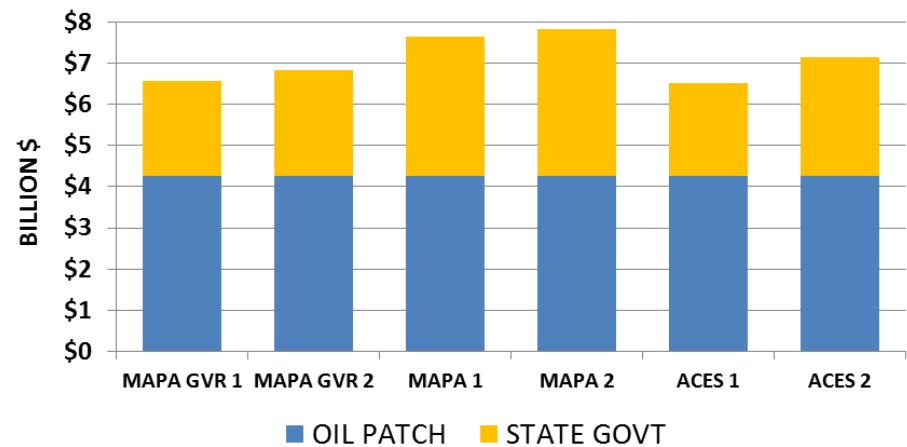


New Investment: Jobs & Payroll

CUMULATIVE NEW JOBS



CUMULATIVE NEW PAYROLL





Some Critiques of Analysis

- Analysis of the future based on assumptions
- Cost data not AUDITED=Garbage in-Garbage out
- Underestimate GVR share of production
- Bias in modeling price and cost as smooth trends
- Producer profits excessive
- Tax incentives do not influence production
- Political power of producers excessive



Want More Analysis?

Invitation to a Technical Workshop

- **Purpose:** Explain the model structure and examine revenue outcomes under many different conditions.
- **Why:** To allow anyone interested to do their own analysis.
- **Where:** UAA Consortium Library, Room 307.
- **When:** Friday, June 27, 2-4 PM.
- **Who:** All technical types invited.

Special Offer!

Get a **FREE** Copy of the Model

Download it from the **ISER** Website!



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Sensitive to an Uncertain Future

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